

ST VINCENT'S COLLEGE STONEWORK REPAIRS AND SEISMIC STRENGTHENING 2018

REVIEW OF ENVIRONMENTAL FACTORS

November 2018 Final Part 5 EP&A Act Environmental Impact Assessment Prepared for St Vincent's College

P A Goldin & Associates Pty Ltd

St Vincent's College Stonework Repairs and Seismic Strengthening

Part 5 EP&A Act Environmental Impact Assessment

Review of Environmental Factors

November 2018

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Certification

This environmental impact assessment in the form of a Review of Environmental Factors (REF) has been prepared by P A Goldin & Associates Pty Ltd NSW on behalf of St Vincent's College. The REF presents the assessment of potential environmental impacts associated with the proposed Stonework Repairs and Seismic Strengthening at the College.

St Vincent's College, as a registered non-government school, is prescribed to be a "public authority" under Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) for the purposes of assessing and carrying out development without consent under clause 36 of the *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP). St Vincent's College is prescribed to be a "determining authority" for these purposes and for the purposes of Section 5.5 of the EP&A Act.

The proposal satisfies the definition of an activity under the EP&A Act, and the REF has been prepared in accordance with the *NSW Code of Practice for Part 5 Activities for Registered Non-Government Schools 2017.* As such St Vincent's College must assess and consider the environmental impacts of the proposal before determining whether to proceed.

This REF has been prepared in accordance with Sections 5.5 of the EP&A Act and Clause 228 of the *Environmental Planning and Assessment Regulation 2000*.

This REF provides a true and fair assessment of the proposed activity in relation to its likely effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed activity.

On the basis of the information presented in this REF it is concluded that:

- (1) the proposed activity is not likely to have a significant impact on the environment and therefore an Environmental Impact Statement is not required.
- (2) the proposed activity is not likely to significantly affect threatened species, populations, ecological communities, or critical habitat. Therefore, a Species Impact Statement (SIS) is not required.
- (3) the proposed Activity is not likely to affect any Commonwealth land, is not being carried out on Commonwealth land, or significantly affect any Matters of National Environmental Significance.

Subject to implementation of the safeguards (mitigation measures) to avoid, minimise or manage environmental impacts listed in this REF, the proposed activity is recommended for approval.

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Designation	Environmental Planner
Certification Statement	<i>"I certify that I have prepared the contents of this REF and, to the best of my knowledge, it is in accordance with the Code approved under clause 244N of the Environmental Planning and Assessment Regulation 2000, and the information it contains is neither false nor misleading"</i>
Signature	- Alexandre
Date	23/11/2018

Executive Summary

St Vincent's College is proposing to undertake stonework repairs to both the Mary Aikenhead Building (Main School Building) and the St Dominics Building (Small School Hall), and seismic strengthening inside their roof spaces for gables and chimneys. The heritage buildings are located within the St Vincent's College school grounds at Potts Point, NSW.

The proposed works (Part 5 activity) are the result of two safety audits of the stone and brick fabric undertaken in 2017 and include:

- repairs to both buildings related to eaves and soffits; external brickwork; external sandstone finials; sandstone gables; sandstone chimneys; and stormwater drainage.
- additional repairs to the Main School Building related to sandstone string courses; and east and west walls
- repairs to the Victoria Street wall due to instability and missing stones.

The reasons for the Part 5 activity is to provide a safer building environment, conserve the heritage stonework, and strengthen the buildings related to seismic events.

The environmental impact assessment, in the form of a Review of Environmental Factors (REF) has been prepared under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), where St Vincent's College is both the proponent and determining authority. This REF documents the proposed activity, assesses the potential environmental impacts and provides environmental safeguards (mitigation measures) to be implemented to avoid, minimise or manage environmental impacts during construction.

The REF has been prepared in accordance with the *NSW Code of Practice for Part 5 Activities for Registered Non-government Schools August 2017* (the Code). The proposed Part 5 activity is considered to be Class 1 works under the Code, and can be categorised as "minor school development works".

The REF concludes that the proposed Part 5 activity has only relatively minor environmental impacts, and any impacts would be managed with the implementation of the safeguards listed in this REF.

The environmental safeguards are associated with potential environmental impacts including:

 public safety; traffic and access; cultural heritage; noise; air quality; water quality, erosion and sedimentation; plant and equipment; waste management; flora and fauna; and utilities and services.

Considering the assessment of the potential adverse environmental impacts in this REF it is concluded that:

- (1) the proposed activity is not likely to have a significant impact on the environment and therefore an Environmental Impact Statement is not required under section 5.7(1) of the EP&A Act.
- (2) the proposed activity is not likely to significantly affect threatened species, populations, ecological communities, or critical habitat under the *Biodiversity Conservation Act 2016*

or the *Environmental Protection and Biodiversity Conservation Act 1999*. Therefore, a Species Impact Statement (SIS) is not required.

(3) the proposed Activity is not likely to affect any Commonwealth land, is not being carried out on Commonwealth land, or significantly affect any Matters of National Environmental Significance.

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List of Abbreviations

BC Act	Biodiversity Conservation Act 2016
Cemp	NSW Code of Practice for Part 5 Activities for Registered Non-government
CSC	Schools City of Sydney Council
Education SEPP	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation 1999
HIS LEP	Heritage Impact Statement Local Environmental Plan
LGA	Local government area
LLS Act	Local Land Services Act 2013
NPW Act	National Parks and Wildlife Act 1974
OEH	Office of Environment and Heritage (formerly DECCW)
OEMP	Operation Environmental Management Plan
POEO Act	Protection of the Environment Operations Act 1997
REF	Review of Environmental Factors
SEPP	State Environmental Planning Policy
SWMP	Soil and Water Management Plan
ТМР	Traffic Management Plan
WHS	Work Health and Safety
WMP	Waste Management Plan

1.Introduction

1.1 Summary of Proposed Activity

The St Vincent's College Board requires stonework repairs to be undertaken to both the Mary Aikenhead Building (Main School Building) and the St Dominics Building (Small School Hall), together with seismic strengthening. These heritage buildings are located within the St Vincent's College school grounds at Potts Point, NSW.

The proposed works (Part 5 activity) are the result of two safety audits by Vivian Sioutas Architects in 2017 and an earlier sandstone assessment and remediation investigation by Heritage 21. The proposed works include:

- repairs to both buildings related to eaves and soffits; external brickwork; external sandstone finials; sandstone gables; sandstone chimneys; and stormwater drainage.
- additional repairs to the Main School Building related to sandstone string courses; and east and west walls
- repairs to the Victoria Street wall due to instability and missing stones.

Structural engineering advice was obtained from Shreeji for the relevant works. The seismic strengthening involves:

 structural repairs and seismic strengthening inside roof spaces for gables and chimneys in both buildings, and the east and west walls in the Mary Aikenhead Building in accordance with structural engineering requirements from Shreeji's.

Ancillary works to facilitate the above works would also be required, and would involve:

- establishment of temporary work site in the College grounds
- erecting scaffolds to carry out the remediation
- use of crane to place materials inside the school grounds and to remove waste materials as a result of the works.

In addition, the REF is informed by an Heritage Impact Statement (HIS) undertaken by Craftech Heritage Services Pty Ltd Architects. Copies of all expert reports are provided in the Appendices to this REF.

1.2 Purpose of the Environmental Impact Assessment

The purpose of this environmental impact assessment is to determine if the proposed activity would have a significant impact on the environment or significantly affect threatened species, ecological communities or their habitats. The environmental impact assessment in the form of a REF describes the proposed Part 5 activity, justifies the need for the proposed activity, gathers information on potential environmental factors relevant to the proposal, considers the need for consultation and additional resources required for the assessment of potential impacts, identifies and analyses the activity's likely environmental impacts, and provides environmental safeguards (mitigation measures) to be implemented to avoid, minimise or manage environmental impacts listed in this REF during construction.

This REF has been prepared in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). For the purposes of the proposed activity, St Vincent's College is the proponent and the determining authority under Part 5 of the EP&A Act. The aim

of the REF is to satisfy the requirements of section 5.5 of the EP&A Act so that St Vincent's College examines, and takes into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of this activity. The potential environmental impacts have been considered in context of clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Reg) and other environmental legislation such as the Heritage Act 1977.

1.3 Approval Process

As a registered non-government school, St Vincent's College must complete an environmental impact assessment under Part 5 of the EP&A Act for the proposed Part 5 Activity in accordance with the *NSW Code of Practice for Part 5 Activities for Registered Non-government Schools* (the Code). The appropriate assessment and approvals process in accordance with the Code for the proposed Part 5 activity is:

Class 1: Review of Environmental Factors - Minor School Development Works

This REF has been prepared to assess the environmental impacts associated with the proposal.

2. Site Description, Need for Proposal and Options Considered

This section describes the site where the proposal is to take place, proposal justification and options considered.

2.1 Site Location

The St Vincent's College is a Catholic secondary school for girls. It is a Sisters of Charity Day and Boarding College and is the oldest registered non-government girl's school in Australia. The school was founded on May 1, 1858 on its present site in Potts Point.



Figure 2-1 St Vincent's College Location Map Source: Google Accessed 2018

The address of the College is No. 1 Challis Avenue, with the main student entrance being from Victoria Street.



Figure 2-2 Aerial view of St Vincent's College and surrounding land uses *Source: Google Accessed 2018*

The school consists of a number of lots namely: Lot 1 DP135902, Lot 1 DP825721, Lot X DP415506, Lot 19 DP975168, Lots 23, 24, 25 & 26 DP4370, Lots 11, 12, 13, 14, 15, 16 & 17 DP2436, and Lot 1 DP935719.



Figure 2-3 School buildings shaded in brown

Source: Google accessed 2018

The College grounds comprise a number of heritage buildings, and more modern, and recently restored buildings. Figure 2-4 provides an aerial image showing the location of the subject buildings within the school grounds.



Figure 2-4: Aerial view of St Vincent's College, with the red arrows indicating the **subject buildings** (Source: Sandstone Condition Assessment and Remediation Advice Report Heritage 21)



Figure 2-4: Figure to the left: St Dominics Building (Main building) on Victoria Street (western façade); Figure to the right: Mary Aikenhead Building (School Hall) on Victoria Street (western facade) (Source: Sandstone Condition Assessment and Remediation Advice Report, Heritage 21)

The subject proposal relates to the Mary Aikenhead Building (School Hall) and the St Dominics Building (Main Building). The HIS provides a detailed description of the heritage significance of these buildings. It states:

Main School Building:

No. 54 - 78 Victoria Street Potts Point was designed by Sheerin & Hennessy, in 1885 and opened in December 1886. Sheerin & Hennessy were the architects commissioned by Cardinal Moran to build St Patrick's College at Manly, which was being constructed the same year as St Vincent's College. The Main Building is a three storey neo - Gothic building constrained by a narrow and rocky site. The building has distinctive bands of decorative pale sandstock brick contrasting with terracotta colour brick and Gothic sandstone details and trims to the windows and doors on the Victoria Street facade.

'The central steep pitched gabled feature with entrance door surmounted by sandstone inscription St Vincent's Convent displaying triple gothic windows, with miniature ones under the eave. On the ground and first floor were ten pairs of tall pointed arch windows, with indoor pulley ropes to open them, while the second floor had pairs of rectangular sash windows ... the sandstone chimneys in clusters of four added to the verticality of the building, and the roof ... was finished in slate. In the front hall of black and white marble tiles, the cedar staircase was beautifully lit by three stained glass windows with ascending base line.' This feature was altered when a brick extension made a new entrance on the garden side, in 1967. (Source: HIS Ruth Daniell 2010)

Small School Hall

Another late 19th Century building in the same Gothic Revival architectural style is located to the south of the 1886 Main Building, and on the Victoria Street frontage it is believed to be also by Sheerin & Hennessy, however the exact date of construction has not been established. The building is a simple brick with stone details and slate roof of two storeys. Its original function is not known at this stage, however for the purposes of this document it is called the 1886 Small School Hall Building.

Another building has been built onto the 1886 Hall this is also a two storey structure. The exact date of construction is not known however it appears to be c.1920. The ground floor of both the 1886 Hall and c.l920 building are currently used for storage, the rooms in the building are used for applied technology rooms.

2.2 Need for Proposal and Options Considered

The HIS provides a detailed description that provides an understanding of the need for the proposal. It states:

Current condition assessment

Vivian Sioutas of Vivian Sioutas Architecture (VSA) supervised two safety audits to the facades of the Main School Building and the School Hall Building of St Vincent's College in late 2017. These safety audits were undertaken by a multidisciplinary team who inspected the condition of the stone and brick fabric. The inspection was conducted via sissorlift, elevated work platform and from the ground. Present at the inspection Vivian Sioutas, Heritage Architect (VSA), Sumeer Gohil and Hari Gohil, Structural engineers (Shreeji), Mark Spinks and James Gardner, Stonemasons (SHS).

Main School Building and Victoria street wall (information from VSA Inspection Report)

During the stone safety inspection of the Main School Building Victoria street Elevation substantial amounts of stone was removed from the string course and the gable coping

stones. The main street Gable no 2 was found to have substantial amounts of loose stone, deteriorated stone elements, missing brickwork and rotting timber.

The perimeter fence located between Main School Building and the School Hall Building has significant structural damage due to tree roots and the finial cross was unsafe and temporarily removed. In addition, brickwork around window reveals was inspected and requires some repairs.

Severe decay of stonework above the main entry door on Victoria street has caused stone to become unsafe around the lettering and in exposed locations. The 'S' of St Vincent's College was temporarily pinned to save the original lettering until conservation works are to commence.

Main School Building Internal Courtyard and School Hall Building (Victoria street Elevation (information from VSA Inspection Report)

A second inspection was undertaken to investigate Main School Building Internal Courtyard from a scissor lift. Gable 6,7 and 8 were inspected.

The internal courtyard of Main School Building was found to be in better condition however the recent glass roof has created some areas of redirected rainfall that is accelerating the rate of deterioration on the stone elements. The introduction of a doorway at Gable 7 has been inserted without detailing the lead weathering above and directing the water runoff away from the building.

The internal string courses were found to be in better condition but some failing stone was removed.

School Hall Building (Victoria street Elevation) were inspected via an Elevated Work Platform which involved Gable 2, Chimney 2 and Chimney 1.

The stone elements of Gable 2 are in good condition and seismic stabilisation has been installed previously that can be seen from the street. Gate 2 has had some substantial stone deterioration and requires replacement and 100% stone repointing.

2.3 Alternative Options Considered

Options considered

The proposal was chosen as being the only option considered feasible.

The intention of the proposed conservation works is to provide a safer building environment, to conserve the heritage stonework and thereby conserve the buildings themselves, and to strengthen the buildings related to seismic events.

The 'do nothing' option

The 'do nothing' option was considered for this proposal. It is important to assess the 'do nothing' option against the proposal to clearly identify the benefits being achieved compared with taking no action.

The 'do nothing' option would involve not undertaking the stonework repairs and seismic strengthening in the Mary Aikenhead Building and the St Dominics Building, or repairs to the Victoria Street fence.

Therefore any potential consequences associated with existing stability of the stonework would not be addressed. These potential consequences included potential safety concerns related to the instability of the stone façade, and also the resultant risk to the integrity of the buildings and both building's importance as local Heritage Items would not be addressed.

The 'do nothing' option would not meet the objectives of the proposal. As a result this option was not considered any further.

2.4 Preferred Option

The works included in the preferred option are the result of three investigations undertaken namely the sandstone assessment and remediation investigation by Heritage 21, and two safety audits by Vivian Sioutas Architects.

A full description of the proposal is provided in Section 3.0 of this REF.

3. Proposed Activity Description

This chapter describes the proposal and provides descriptions of existing conditions, the design parameters including major design features, the construction method and associated infrastructure and activities.

3.1 The proposal

3.1.1 Scope of works - H21 Conservation remediation repairs

Following an inspection of the heritage facades of the two buildings and boundary wall by H21, the following conservation remediation repairs are recommended in the H21 Report to solve the problems found. Prior to tender, scaffolding would be erected for use by tenderers to price the works and carry out the remediation recommended by H21.

Cruciform finials – located in roof (gables) of main building and school hall, and boundary wall

- Replace finial base on the main building southern gable with new stone to match original profile.
- 2. Preventative action: seismically brace the finials (bracing rod inserted from above through the finial anchoring it into the underlying stonework in accordance with structural engineer's detail).
- 3. Follow up with removal of scaffold.







Figure 19. Cruciform finial on the main building southern gable, showing a crack along the sandstone base of the



Figure 21. Cruciform finial on the boundary fence between the main school building and the school hall building.



Figure 18. Cruciform finial on the school hall building roof (Early signs of failing at the base of the finial).



Figure 20. Cruciform finial on the main building southern gable, with delamination of the sandstone base of the finial



Figure 22. Cruciform finial on the boundary fence to the south of the school hall building.

Figure 3.1: Figures from H21 Report p.13 showing areas where work is required

Chimneys in roofs of both the main building and the school hall

- 1. Preventative action: seismically bracing the chimneys (bracing rod inserted from above through the chimney anchoring it into the underlying stonework in accordance with structural engineer's detail)
- 2. Follow up with removal of scaffold.



Figure 23. Location of chimneys on the main building roof. (Google Maps, annotated by Heritage 21)



Figure 25. Chimney on the main building's southern end (Staining, lichen growth). A small carbonaceous occlusion can be seen on the bottom of the right chimney pot (does not weaken the stone).



Figure 24. Location of chimneys on the school hall roof. (Google Maps, annotated by Heritage 21)



Figure 26. Chimney above the main building's western central gable (Staining).



Figure 27. Chimney on the school hall's western façade (Victoria Street) (Staining, lichen growth).



Figure 28. Chimney on the school hall's southern end (Staining, lichen growth).

Figure 3.2: Chimney conservation repair locations (Figures from H21 Report)

Gable barge – located in gabled roofs of main building and school hall

- Remove affected gable barge stones and indent with new stones to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:98).
- 3. Follow up with removal of scaffold.





Figure 29. Gable barge on the school hall northern façade - 1886 western gable.



Figure 31. Gable barge on the main building southern gables (exfoliation).



Figure 33. Gable barge on the main building southern facade (exfoliation).



Figure 32. Gable barge on the main building western central gable (exfoliation).



Figure 34. Gable barge on the school hall eastern façade, with evidence of previous repairs (Improperly repaired).

Figure 3.3: Gable barge conservation repair locations (Figures from H21 Report)

Tympanium stone located in gable face of the main building and the school hall

- Remove affected tympanum stones of the gable faces and indent with new stones to match original profiles.
- 2. Remove failing flashing (Figure 37, back of Victoria Street gable of the school hall) and flash with electrolytically compatible metals.
- 3. Repoint with appropriately specified mortar (1:2:99).
- 4. Follow up with removal of scaffold.



Figure 35. Tympanum of gable face on the projecting part of the most southern gable of the main building (Advanced efforescence).



Figure 37. Top stone on the back of the school hall's Victoria Street gable (Exfoliation).



Figure 36. Tympanum of gable face on the projecting part of the most northern gable of the main building (Advanced efflorescence).

Figure 3.4: Tympanium stone conservation repair locations (Figures from H21 Report)

Capping of boundary wall

- 1. Protect vegetation.
- 2. Relocate electricity duct away from the building or if redundant, remove entirely.
- Remove affected capping and replace with new stones to match original stones.
- 4. Repoint with appropriately specified mortar (1:2:910).
- 5. Follow up with removal of scaffold.



Figure 38. Capping on the eastern façade of the school hall (Delamination causing unstable stone).



Figure 40. Detail of capping on the boundary wall between the main building and the school hall (Staining, hairline cracking, and cement application at later date).



Figure 42. Capping on the boundary wall to the south of the school hall (eastern façade) (Staining, lichen growth, vegetation growth).



Figure 39. Capping on the boundary wall between the main building and the school hall (Improperly repaired).



Figure 41. Capping on the boundary wall between the main building and the school hall (Cramps have been added at a later date).



Figure 43. Capping on the boundary wall to the south of the school hall (western façade) (staining, lichen growth, hairline cracking).



Figure 44. Later addition to the southern end of the main building: this is not sandstone, but concrete capping.

Figure 3.5: Conservation repair locations to capping of boundary wall (Figures from H21 Report)

Label moulds - located around all triple gothic windows on the western façade (Victoria Street) of the main school building

- 1. Remove affected label mould stones and indent. Where previously removed, indent to match original profile.
- 2. Repoint with appropriately specified mortar (1:2:911).
- 3. Follow up with removal of scaffold.



Figure 45. Label moulds around stain-glass window on the main building's central gable (western façade) (Delamination/case hardening and removal of the label



Figure 46. Label moulds around windows on the western façade of the main building [Delamination/case hardening].



Figure 47. Label moulds around centrally located *oeil de boeuf* window on the main building's most southern gable/right gable (western façade) (Delamination/case hardening and removal of the label mould).



Figure 48. Label moulds around centrally located *oeil de boeuf* window on the main building's most northern gable/left gable (western façade) (Delamination/case hardening and removal of the label mould).





Figure 50. Detail of one of the label moulds, which -even though the section has been removed in the past, it continues to degrade as a result of the cementitious/ elastomeric mortar in the joints.

Figure 3.6: Label mould conservation repair locations (Figures from H21 Report)

Lintels – located above windows and above doors

- Indent affected stones ('Voussoir indent') to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:9).
- 3. Follow up with removal if scaffold.



Figure 3.7: Lintel conservation repair locations (Figures from H21 Report)

Sills – located in main school building and school hall

- Indent affected stones ('Inverted voussoir indent') to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:915).
- 3. Follow up with removal of scaffold.



Figure 3.8: Sill conservation repair locations (Figures from H21 Report)

Columns between central windows on the western façade (Victoria Street) of the main school building

- 1. Remove affected capital stones and replace with new stones to match original profiles.
- 2. Follow up with removal of scaffold.





Figure 63. Detail of column capital (Staining, corn

Figure 3.9: Column conservation repair locations (Figures from H21 Report)

String courses – located on western façade (Victoria Street) of the main school building; and western façade of the school hall (1886 part of the L-shaped building, perpendicular to Victoria Street)

- 1. Remove affected string course stones and indent. Where previously removed, indent to match original profile.
- 2. Repoint with appropriately specified mortar (1:2:917).
- Follow up with removal of scaffold.

Label Moulds located around the central entry door to the main school building (Victoria Street); and around the entry door located within the boundary wall section to the south of the school hall

- Remove affected label mould stones and indent with new stones to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:918).
- 3. Follow up with removal of scaffold.



gure 64. String course on the western façade of the

Figure 65. String course on the western façade of the ma building (Removal of the string course).

Figure 3.8: String course conservation repair locations (Figures from H21 Report)



Figure 66. Label moulds around central entry door to the main building (Delamination/case hardening).



Figure 67. Label moulds around entry in boundary wall section to the south of the school hall (Staining).

Figure 3.9: Label mould conservation repair locations (Figures from H21 Report)

Voussoirs/Arch and Fielded Panels – located above the central entry door to the main school building (Victoria Street); and above the entry door located within the boundary wall section to the south of the school hall

- 1. Remove affected voussoir/arch stones and indent with new stones to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:919).
- 3. Follow up with removal of scaffold.





Figure 68. Arch above main building central entry door. The fielded panel above this door includes a six-lobed foil glazed oculus.

Figure 69. Detail of arch above main building central entry door (Efflorescence).



Figure 70. Detail of arch above main building central entry door IEfforescencel.



Figure 72. Arch above doorway through boundary wall section to the south of the school hall (Efflorescence). The fielded panel above this door includes three pointed arched recesses.



Figure 71. Detail of arch above main building central entry door.



Figure 73. Detail of arch above doorway through southern boundary wall section (Efflorescence).

Figure 3.10: Voussoirs/Arch and Fielded Panels conservation repair locations (Figures from H21 Report)

Doors jambs - located around the central entry door to the main school building (Victoria Street); and around the entry door located within the boundary wall section to the south of the school hall

- 1. Remove affected jamb stones and indent with new stones to match original profiles.
- 2. Repoint with appropriately specified mortar (1:2:920).
- 3. Follow up with removal of scaffold.





Figure 74. Door jambs of the main building's central entry (Efforescence, delamination).





Figure 77. Door jambs of the main building's central entry (Efforescence, delamination and filled up holes probably relating to original signage/doorbell).



Figure 78. Door jambs of the main building's central entry (Efforemence delamination)



Figure 79. Door jambs of the main building's central entry (Delamination).



Figure 80. Door jambs of the entry door immediately south to the school hall building (Efflorescence, discolouration).

Figure 3.11: Door jambs conservation repair locations (Figures from H21 Report)

Heraldry 'St Vincent's Convent' sign – located above the central entry door to the main school building (Victoria Street)

- 1. Indent entire stone. Otherwise consider replacing entire stone with cast bronze facsimile.
- 2. Repoint with appropriately specified mortar (1:2:921).
- 3. Follow up with removal of scaffold.



Figure 81. 'St Vincent's Convent' sign above the central entry to the main building (Delamination, salt crystallization).



Figure 82. 'St Vincent's Convent' sign above the central entry to the main building (Delamination, salt crystallization).

Figure 3.12: Heraldry sign conservation repair locations (Figures from H21 Report)

Saddle stones and capping – located in the buttresses (western and eastern façade of the main school building)

- Remove affected capping stones and indent with new stones to match original profiles
- 2. Repoint with appropriately specified mortar (1:2:922).
- 3. Follow up with removal of scaffold.





Figure 83. Saddle stones and capping on buttress on the western façade of the main building (Delamination).

Figure 84. Saddle stones and capping on buttress on the western façade of the main building (Delamination).



Figure 85. Saddle stones and capping on buttress on the eastern facade of the main building (Replaced in the past).

Figure 3.15: Buttresses – saddle stones and capping conservation repair locations (Figures from H21 Report)

Niches and 'Gablets' – located on either side of the central gable on the western façade (Victoria Street) of the main building; and on the end of the gables of the main building and the school hall building

- Remove affected niche stones and indent with new stones to match original profiles.
 Repoint with appropriately
- specified mortar
- Follow up with removal of scaffold.



Figure 86. Niches on either side of the central gable on the western façade of the main building.





Figure 87. Most northern niche on the central gable of the main building (Staining, delamination).





Figure 89. Most southern niche on the central gable of the main building (Staining, delamination).



Figure 91. Gablet on gable on southern façade (front gable) of main building (Previous salt attack).



Figure 93. Gablet on gable on the eastern façade of main building (Staining, lichen growth).



Figure 90. Detail of southern niche on the central gable of the main building (Staining, delamination).



Figure 92. Gablet on gable on the southern façade (back gable) of main building (Efflorescence).



Figure 94. Gablet on the Victoria Street gable of the school hall building (Crack which has been patched with mortar in the past).

Figure 3.16: Niches and 'Gablets' conservation repair locations (Figures from H21 Report)

Quoins (Gables) - located on the end of the gables of the main building and the school hall building

- 1. Remove affected quoins stones and indent with new stones to match original profiles.
- 2. Repoint with appropriately specified mortar.
- 3. Follow up with removal of scaffold.



Figure 95. Quoin (under string course) on the central gable of western façade of the main building (Advanced efflorescence). This problem is mirrored on the other end of this central gable.



Figure 96. Quoin on the southern façade of the main building (Staining, delamination).



Figure 97. Quoins on the northern façade of the school hall – 1886 western gable (Efflorescence, delamination)



Figure 99. Quoins (under capping) on the eastern façade of the school hall (Efflorescence).



Figure 100. Quoins on the northern façade of the school hall (Efflorescence). This is where the 1950 addition was joined into the 1886 building.

Figure 3.17: Quoins conservation repair locations (Figures from H21 Report)

Plinth – located on the main building and the school hall building

- Remove affected plinth stones and indent with new stones to match original profiles
- Where stone has been inappropriately rendered over in the past, remove render and indent the stone to match original profile
- 3. Repoint with appropriately specified mortar
- 4. Follow up with removal of scaffold



Figure 3.18: Plinth conservation repair locations (Figures from H21 Report)

Bricks - located on the main building and the school hall building

- 1. Repoint with appropriately specified mortar
- 2. Follow up with removal of scaffold





Figure 106. Plinth on western façade of main building (Efflorescence).



Figure 107. Bricks on the eastern side of the boundary wall between the main building and the school hall (missing mortar, cracking).

Figure 3.19: Brick conservation repair locations (Figures from H21 Report)

3.2 Construction Methodology

Given the location of the works within a school, detailed construction planning would be required prior to works commencing. The exact construction methodology would be determined by the successful contractor.

An indicative construction methodology has been provided based on the proposed design details. It is likely that the contractor would undertake the works in stages with only areas where active construction activities are occurring cordoned off. This would allow the use of other parts of the building not included in the works at that time. For instance, the repair to the exterior of the Mary Aikenhead building could be undertaken whilst the hall and classrooms are still in use – as long as noise and air quality to the rooms was satisfactorily dealt with.

3.2.1 Construction Activities

The works would be undertaken in various sections with works to the Mary Aikenhead building in the first instance followed by the St Dominic Building.

- Preliminaries
 - Preparation of the Construction Environmental Management Plan and associated documentation;
 - Identification of services.
 - Site establishment;
 - Site compound, stockpile areas, parking areas and fencing etc
 - Installation of scaffolding and air quality controls.
- Site preparation
- Construction works would need to be staged starting with Mary Aikenhead building followed at a later time by the St Dominic Building
- Supply of materials
- Following remediation, the facades will be washed down using water only
- Removal of scaffold
- Site dis-establishment and clean up

3.2.2 Construction Equipment

The majority of the works will be undertaken by hand. Only light vehicles would be used to transport personnel, hand held tools, stone, and materials for mortar.

3.2.3 Construction Program

The construction program would be 25.5 months for the Mary Aikenhead building, and approximately the same time for the St Dominic Building. The fence repair works would take approximately 3 months and work be undertaken concurrently whilst works to the Mary Aikenhead building are being undertaken. The works are planned to commence in 2019.

7.2.4 Construction Working Hours

All activities or project works, including the arrival and departure of vehicles delivering or removing materials from or to the site, would be carried out between the hours of 7.00 am to 5.00 pm. Mondays to Fridays, and 8.00 am to 5.00 pm Saturdays. Works are not permitted on Sundays and public holidays.

Although these hours of work are recommended, within the College there may be many potential sensitive receivers (students and teachers). Therefore, it would be necessary for consultation to be undertaken by the contractor developing the noise management plan, with the management of the College to identify the sensitive receivers, specific curriculum periods (e.g. trial exams, final HSC Exams and other assessments) and to determine the potential impact on their operations. Appropriate noise and vibration control measures including work hours on specific days can then be identified. Works would also be undertaken in holiday periods.

Work could be undertaken outside these hours only with prior written approval from the Principal's Authorised Person after consultation with the College.

3.3 Construction Management Issues

3.3.1 Construction Environmental Management Plan

The proposed works would be undertaken in accordance with a Construction Environmental Management Plan (CEMP) prepared by the construction contractor and approved by the College prior to the commencement of works. The CEMP would include detailed construction and contingency planning and scheduling of works. The plan would reflect the environmental safeguards identified in Section 5 of the REF, and incorporate the following relevant sub-plans:

- Public Safety Plan
- Air Quality Plan
- Noise Plan
- Traffic and Access Management Plan
- Waste Management Plan

3.3.2 Construction Site Facilities

The contractor would establish a works compound area to accommodate vehicle / equipment parking, stockpile areas, construction facilities for workers, storage and material lay down areas, and rubbish bins. The entire works area, including the construction compound would be fenced.

At completion of the works, the work areas would be left in a clean, tidy and attractive state. The compound site would be restored to a condition equivalent to or better than the original.

4. Statutory Planning Framework

This section describes the environmental legislation and environmental planning instruments applicable to the proposal.

4.1 Environmental Planning Instruments

4.1.1 Sydney Local Environmental Plan 2012

St Vincent's College is located within the City of Sydney LGA. The *Sydney Local Environmental Plan* 2012 (Sydney LEP) identifies the land use zones relevant to the site. The school and its grounds are located within Zone R1 General Residential.

The objectives of Zone R1 are:

- To provide for the housing needs of the community
- To provide for a variety of housing types and densities
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To maintain the existing land use pattern of predominantly residential uses.

The St Vincent's College may be defined as an educational establishment and the proposed works are "permitted with consent" in the R1 zone under the Sydney LEP.

However, as the proposed works would be permitted without consent under the *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP), the planning approval pathway and development controls contained in this LEP would not be applicable to the proposed activity.



Figure 4-1 Zoning Extract Sydney LEP 2012 (Map 021) - R1 General Residential Zone

4.1.2 Sydney Development Control Plan 2012

The Development Control Plan (DCP) applies to the subject site, however the proposal is assessed under the provisions of the Education SEPP and its relevant provisions, and not the DCP.

4.1.3 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

The aim of this Policy is to facilitate the effective delivery of educational establishments and early education and care facilities across the State by:

(a) improving regulatory certainty and efficiency through a consistent planning regime for educational establishments and early education and care facilities, and

(b) simplifying and standardising planning approval pathways for educational establishments and early education and care facilities (including identifying certain development of minimal environmental impact as exempt development), and

(c) establishing consistent State-wide assessment requirements and design considerations for educational establishments and early education and care facilities to improve the quality of infrastructure delivered and to minimise impacts on surrounding areas, and

(d) allowing for the efficient development, redevelopment or use of surplus government-owned land (including providing for consultation with communities regarding educational establishments in their local area), and

(e) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and

(f) aligning the NSW planning framework with the National Quality Framework that regulates early education and care services, and

(g) ensuring that proponents of new developments or modified premises meet the applicable requirements of the National Quality Framework for early education and care services, and of the corresponding regime for State regulated education and care services, as part of the planning approval and development process, and

(*h*) encouraging proponents of new developments or modified premises and consent authorities to facilitate the joint and shared use of the facilities of educational establishments with the community through appropriate design.

The proposal is considered consistent with these aims, particularly (b) and (c).

Clause 36(1) of the Education SEPP is relevant to the proposed activity. The clause states:

(1) Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school:

(a) construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of:

(i) a library or an administration building that is not more than 1 storey high, or

(ii) a portable classroom (including a modular or prefabricated classroom) that is not more than 1 storey high, or

(iii) a permanent classroom that is not more than 1 storey high to replace an existing portable classroom and that is used for substantially the same purpose as the portable classroom, or

(iv) a kiosk, cafeteria or bookshop for students and staff that is not more than 1 storey high, or

- (v) a car park that is not more than 1 storey high,
- (b) minor alterations or additions, such as:
- (i) internal fitouts, or

(ii) alterations or additions to address work health and safety requirements or to provide access for people with a disability, or

(iii) alterations or additions to the external facade of a building that do not increase the building envelope (for example, porticos, balcony enclosures or covered walkways),

- (c) restoration, replacement or repair of damaged buildings or structures,
- (d) security measures, including fencing, lighting and security cameras,
- (e) demolition of structures or buildings (unless a State heritage item or local heritage item).

The proposal satisfies the provisions of Clause 36(1)(c) of the Education SEPP and is permissible without consent. The works proposed can therefore proceed without the need to obtain development consent. Note that the term "without consent" means without the consent of council, however consent is still required from the determining authority (the school) of the environmental impact assessment in the form of this REF and if any other approvals are required such as under the *Heritage Act 1977*.

The proposal does not alter any traffic arrangements, nor increases the number of students or staff at the school. Therefore Clause 36(2) is not applicable to the proposal.

The Design Guide for Schools, prepared by the Government Architect NSW accompanies the Education SEPP. Pursuant to Clause 35(6)(a), the Education SEPP requires that a consent authority take into consideration the design quality of a proposed school development when evaluated in accordance with seven design quality principles before determining. The design quality principles are outlined in Schedule 4 of the Education SEPP. As the proposal is assessed under Clause 36 of the Education SEPP, the design quality principles are not requirements to be assessed. Nevertheless, due to the conservation repair nature of the proposal is considered that the proposal is not inconsistent with these principles.

4.2 Relevant Legislation

4.2.1 Environmental Planning and Assessment Act 1979

The applicable environmental planning instrument for the proposed remediation conservation works is the Education SEPP (refer to Section 4.1.3 of this REF), which provides the permissibility for the proposed activity.

The proposal satisfies the definition of an activity under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and St Vincent's College, as a registered nongovernment school, is defined as a "public authority" under Section 1.4(1) of the EP& A Act. And This means that St Vincent's College is a "prescribed determining authority" prescribed to be a "public authority" under Part 5 of the EP&A Act for the purposes of assessing and carrying out development without consent under Clause 36 of the Education SEPP.

St Vincent's College is prescribed to be a "determining authority" for these purposes and for the purposes of Section 5.5 of the EP&A Act. Therefore, St Vincent's College is both the proponent and the determining authority for the proposed activity. As such St Vincent's College

must assess and consider the environmental impacts of the proposal before determining whether to proceed.

This REF has been prepared in accordance with Section 5.5 of the EP&A Act, which requires that the proponent take into account to the fullest extent possible all matters affecting or likely to affect the environment due to the proposed activity.

4.2.2 Environmental Planning and Assessment Regulation 2000

The Environmental Planning and Assessment Regulation 2000 (EP&A Reg) provides special provisions relating to proprietors of registered non-government schools. These provisions relate to compliance with the NSW Code of Practice for Part 5 Activities for registered non-government schools (Code) gazetted on 1 September 2017.

In relation to the proposal, the Code provides that various matters must be included in the environmental impact assessment (in the form of a REF), before the determining authority (the school) approves the proposal and signs the REF.

The Code provides that the REF is to be placed on the school's web site after approval. Various other matters are included in the Code, such as that the works need to comply with the BCA (now the National Construction Code) and a suitably qualified person needs to state that the works comply. The REF has been prepared in accordance with this Code.

Consideration of the factors listed under Clause 228 of the EP&A Reg has been used to assist in assessing the significance of the proposal and is provided in Appendix A.

4.2.3 Heritage Act 1977

The objectives of the NSW *Heritage Act 1977* include the conservation of heritage and the identification and registration of items of State heritage significance. The Act is concerned with all aspects of conservation, including protection against damage and destruction, to restoration and enhancement. All historic remains and all potential sub-surface archaeological features are subject to provisions of the Act and are therefore afforded concurrent statutory protection.

The site is included as an item of local significance in the Office of Environment and Heritage (OEH) Heritage Register.

An application under s60 of the *Heritage Act* 1977 is not required to be submitted to the NSW Heritage Council, as the scope of conservation works are generally considered to be repair or maintenance, and are exempt from approval (without notification) under Section 57(2) of the NSW Heritage Act.

An exemption notification form would need to be provided to the NSW Heritage Council prior to commencement of works. The form is required for the proposed seismic stabilisation works including any structural works and the insertion of new fabric. The HIS would need to accompany the exemption notification.

4.2.4 Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act* 1997 (POEO Act) regulates air, noise, land and water pollution, and is administered by Environment Protection Authority (EPA).

Activities listed under Schedule 1 of the POEO Act are scheduled activities which require an Environment Protection Licence (EPL) to be issued by the Environment Protection Authority (EPA). The proposed works are not a scheduled activity and therefore an EPL would not be required for this proposal.
Although the proposed works may not be a scheduled activity, under Section 120 of the POEO Act it is an offence to pollute water unless an EPL is obtained.

Assuming that the safeguards identified in this REF are implemented, it is anticipated that no pollution of the waters would occur as a result of the proposal, and that the resources are protected and conserved. As such, an EPL for the proposed works is not anticipated to be required.

4.2.5 Protection of the Environment Operations (Waste) Regulation 2005

The *Protection of the Environment Operations (Waste) Regulation* 2005 sets out the provisions with regards to non-licensed waste activities and non-licensed waste transporting, in relation to the way in which waste must be stored, transported, and the reporting and record-keeping requirements. The disposal of construction waste, if any, would be required to comply with this regulation.

4.2.6 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) replaces the *Threatened Species Conservation Act 1995* (TSC Act). The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The impacts of any works that may affect 'threatened species', as listed in the BC Act, must be properly assessed. The proposed works does not impact on any threatened species and no vegetation will be removed. Therefore the preparation of a Species Impact Statement is not required, nor are any biodiversity assessments or offsets required.

4.2.7 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act) provides for Commonwealth involvement in development assessment and approval in circumstances where there exist 'matters of national environmental significance'. Matters of national environmental significance include:

- World Heritage properties;
- National Heritage places;
- Ramsar Wetlands;
- Nationally threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- Great Barrier Reef Marine Park; and
- Nuclear actions (including uranium mining).
- A water resource, in relation to coal seam gas development and large coal mining development.

Under this Act an action would require approval from the Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance.

The site is not considered to provide significant habitat for threatened species which are protected under the EPBC Act, and therefore the proposed works would not have a significant impact on any of these matters.

As such, the works would not be deemed a controlled action and would not require referral to the Federal Minister for the Environment for further consideration and approval.

4.3 Summary of Approvals and Permits

Table 4-1 provides a summary of the approvals or consents required in relation to the proposed worksl.

Table 4-1 Summary of Approvals, Permit and Consents

Agency	Requirements	Reference
St Vincent's College	Determination of the proposed activity under Part 5 of the EP&A Act.	Part 5 of EP&A Act
City of Sydney Council	Mobile Hoisting Devices Operating from a Road/Footway Application for a Permit	S68, LGA 1993 and S138, Roads Act 1993
NSW Heritage Council	Exemption Notification to the NSW Heritage Council related to the structural works and the insertion of any new fabric. Detailed drawings, an exemption form accompanied by the HIS would be required.	Section 57(2) of the Heritage Act

4.4 Statutory Consultation

Mandatory consultation is not required either under Clause 11 of the Education SEPP, or Clause 3.3.3 of the Code.

Nevertheless, the College wished to notify City of Sydney Council of the proposed activity, and an email was sent to Council on 31 July. At the request of Council a copy of the draft HIS was sent to Council on 31 August 2018, and further information was sent on 10 September 2018. The draft REF will be made available to Council.

Once determined the REF will be made available on St Vincent's College web site in accordance with Clause 3.3.3 of the Code.

5. Environmental Assessment

This section identifies and characterises the likely potential impacts associated with the construction of the proposal. Where considered necessary, mitigation measures are identified.

5.1 Assessment Methodology

The key objectives of this assessment are:

- Identify those facets of the environment likely to be affected by the proposal
- Identify the sensitivity of the site
- Identify and characterise the associated impacts
- Identify and evaluate mitigation measures for the identified impacts

Environmental issues of potential relevance to the proposal would be associated with the construction phase and include impacts associated with:

- Land Use and amenity
- Public safety
- Traffic and access
- Cultural Heritage
- Noise
- Air quality
- Waste management
- Flora and fauna

The proposed works have been evaluated with due consideration of the provisions of Clause 228 of the EP&A Regulation (refer to Appendix A). The mitigation measures provided in this section would be incorporated into the CEMP for the works and are provided separately in Section 7.

5.1 Construction Impacts

5.1.1 Land Use and Amenity

St Vincent's College is proposing to undertake stonework repairs and seismic strengthening in both the Mary Aikenhead Building and the St Dominics Building. The buildings are located within the St Vincent's College school grounds at Potts Point, NSW.

The reasons for the proposed works is to provide a safer building environment, conserve the heritage stonework, and strengthen the buildings related to seismic events.

The construction works would occupy a small area of the College at any one time.

Specific areas of the specific building being worked on would be inaccessible during the construction program. The remainder of that specific building would remain open subject to noise and air quality controls. In relation to the fencing works the footpath may be closed or partially closed with a deviation provided for pedestrians, subject to the requirements of the City of Sydney.

The specific staged works area, including construction compound and stockpile sites would be fenced during the entire construction period to ensure student and public safety. The remainder

of the College will be unaffected by the construction works and would remain open to the users of the College grounds.

In addition, traffic, noise and air quality impacts associated with construction would impact upon the general amenity for the users of the College grounds.

Mitigation Measures

Detailed construction planning is to be undertaken to ensure the impact to users (students, teachers, parents and visitors) of St Vincent's College is minimised.

Work areas and surrounding areas would be kept clean and free from rubbish and debris during the entire construction period.

All construction materials and equipment are to be stored within the construction compound.

On completion of the work the contractor would remove all temporary scaffolding, depots, and facilities and reinstate the areas disturbed by the construction activities to a condition equivalent to or better than the pre-construction condition unless otherwise agreed to with St Vincent's College.

Footpaths shall maintain uniform contours for safe walking.

Signage would be provided and regularly updated to inform the College users and the public of the likely timing and programming of the works, changes to pathway/walkway access, detail areas where public access will be temporarily unavailable and other important safety information.

The contractor is to develop a Communication Plan detailing the consultation strategy to be implemented during the construction period. Related to the fence repairs.

5.1.2 Public Safety

The Contractor would be required to ensure that work is carried out at all times in a manner that is safe to users of the College, members of the public and the contractor's work force related to the repairs, including implementation of work health and safety and traffic management measures. Security fencing would be maintained around the fence works area, and to prevent unauthorised access to the entire works area including both the Mary Aikenhead Building and the St Dominics Building and construction compound area to ensure the safety of the users of the College, the public and workers. Traffic management measures are detailed further in Section 8.1.3 of this REF.

Contractors would be required to liaise closely with St Vincent's College with regards the construction program and the scheduling of works.

Mitigation Measures

- A Safety Management Plan would be prepared by the Contractor. The Contractor is to ensure that work is carried out at all times in a manner that is safe to users of the College, members of the public and the construction work force.
 - The Safety Management Plan would address public safety and construction work safety including occupational health and safety risk mitigation measures in relation to workers during construction.
 - Signage would be provided and regularly updated to inform the users of the College and the public of the likely timing and programming of the construction works, detail areas where access will be temporarily unavailable and other important safety information.

- o Signage to be approved by St Vincent's College prior to being erected.
- The work site is to be made safe, kept tidy and equipment stowed in a secure state outside of normal work hours.
- Provide a fully enclosed scaffold and site area, including amenities compound with temporary construction fencing.
- The construction area would be cordoned off and out of bounds to staff, visitors and students for the duration of the construction activities.
- Carry out all works in compliance with the requirements of WorkCover NSW and the provisions of the *Work Health and Safety Act 2011* and Work Health and Safety Regulation 2011, to ensure the safety of staff, students, visitors and the general public.
- In accordance with WorkCover requirements, all plant and equipment used in construction work must comply with the relevant Australian Standards and manufacturer specifications.
- Do not lift loads over occupied areas, with any such activities to be undertaken out of College hours or with the relocation of students/staff in co-ordination with the College.
- Record and attend to any community complaints promptly. On receiving a complaint, works would be reviewed to determine whether issues relating to the complaint can be avoided or minimised. Feedback would be provided to the complainant explaining what remedial actions were taken.

5.1.3 Traffic and Access

Construction Impacts

Throughout the construction period vehicles would arrive at the site to deliver construction materials and construction personnel and remove waste materials. Construction equipment and personnel may also be delivered to the site using small trucks or vehicles. The number of vehicle movements per day is not known but would be minimal due to the extent of the works.

There would be short term and temporary traffic impacts within the College grounds during the works, due to the additional traffic movements associated with construction works.

Measures would need to be put in place to ensure that access to authorised areas of the College, is not impeded by the construction works.

This impact is anticipated to be minor and can be adequately managed to minimise impacts, as listed below.

Mitigation Measures

- A Traffic Management Plan (TMP) as part of the CEMP would be prepared by the Contractor to be reviewed and approved by or on behalf of the College prior to commencement of the construction works. The TMP is to include appropriate and site specific measures to minimise traffic impacts ensure students, worker visitor and public safety.
 - The TMP is to be prepared in accordance with:
 - a. RMS's Traffic Control at Work Sites Manual, Issued 2010, and
 - b. Australian Standard 1742.3 2002 Traffic Control Devices for Works on Roads.
 - The TMP would cover all aspects of public access and traffic management at the site with the aim of minimising the impact of the construction work on safety, and the existing traffic flow and public access areas.

- The TMP would include, but not limited to describing the methods for:
 - a. Materials delivery and stockpiling at the site;
 - b. Transportation of materials to the site of works/installation;
 - c. Safe entry and egress from the site,
 - d. Confirmation of truck movements including traffic routes and number of truck journeys;
 - e. Methods to ensure safety to users of the College, the public and construction workers;
 - f. Minimising any reduction in existing parking as well as impacts to pedestrian access adjacent to the fence repair area;
 - g. Keeping all roads free of mud and dust
 - h. Compliance with applicable traffic laws and regulations including speed limits. Compliance with College speed limits. outside and within the College.
- Undertake dilapidation reporting of Council assets (e.g. guttering, kerbs and footpaths) prior to and following completion of the works. Restore any damaged areas to preconstruction condition upon completion of the construction works.
- No vehicle maintenance would be permitted in the construction areas except in emergencies.
- Post construction any roads or footpaths impacted by the works would be returned to a condition equivalent to or better than its prior condition.

5.1.4 Cultural Heritage

European Cultural Heritage

An Heritage Impact Statement (HIS) has been prepared by Craftech Heritage Services Pty Ltd for the subject proposal. The HIS has analysed the proposed works and the potential impacts on the heritage significance of the Main School Building and the School Hall Building.

The St Vincent's Convent group including buildings and their interiors and grounds at 1 Challis Avenue, Potts Point are listed as Item No I1121 in the Sydney LEP as a Local Item. The Lots included are: Lots 11-17, DP 2436; Lot 1, DP 135902; Lot 19, DP 975168; Lot X, DP 415506.

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Sydney LEP 20	12, Schedule 5 Environme	ntal Heritage – IT	EM INFORMATION	
Item I1121	St Vincent's Convent group including buildings and their interiors and grounds	1 Challis Avenue	Lots 11–17, DP 2436; Lot 1, DP 135902; Lot 19, DP 975168; Lot X, DP 415506	Local
Item I1122	Former convent "Bethania" and "Carmelita" (formerly 15–19 Challis Avenue) including interiors	1 Challis Avenue	Lot 1, DP 935719; Lot 10, DP 912103	Local



Figure 5-2 Heritage Map Extract Sydney LEP 2012 (Map 021) showing Heritage items (numbered) and Heritage Conservation Area (red stripe)

The subject site is also located within a Heritage Conservation Area as shown in the Figure above (red striped area).

The HIS indicates that the subject site is in the vicinity of several heritage items as follows:

Item No.	Name	Address	Significance
00020	Rockwall	7 Rockwall Crescent Potts Point	State
00068	Terrace	55 Victoria Street Potts Point	State
l1126	Byrock & Uralla	21-23 Challis Avenue Potts Point	Local
l1124	Camelot Hall	2A Challis Avenue Potts Point	Local
l1123	Korein and Maroura	2-4 Challis Avenue Potts Point	Local
l1127	Highclere and Romney Hall	25-27 Challis Avenue Potts Point	Local
<mark> 116</mark> 8	Edina	75 Victoria Street Potts Point	Local
l1173	Terrace house group	80-102 Victoria Street Potts Point	Local
<mark> 1154</mark>	Terrace house group	6-14 Rockwall Crescent Potts Point	Local
I1155	Terrace house group	16-20 Rockwall Crescent Potts Point	Local
11152	Terrace house	2-4 Rockwall Crescent Potts Point	Local

A Conservation Management Plan has been prepared for the St Vincent's College. Prepared by Ruth Daniell in 2010 the HIS states:

This document has outlined and developed conservation policies, arising out of the assessment of the historic significance of the St Vincent's College and surrounding site.

To retain the heritage significance of the St Vincent's College buildings including the safety surrounding the site and settings the proposed works have been developed in accordance with the aims and intentions of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter).

The proposed works have been assessed against the Conservation Policies described in the CMP for St Vincent's College and are found to have no negative impacts on the heritage significance of the St Vincent's College and the surrounding site (as above in 6.2 Rationale and assessment of heritage significance).

The HIS also states that the proposed works are in accordance with the management provisions outlined in the heritage inventory sheet:

The Heritage Inventory Sheet states:

The building should be retained and conserved. A Heritage Assessment and Heritage Impact Statement, or a Conservation Management Plan, should be prepared for the building prior to any major works being undertaken. There shall be no vertical additions to the building and no alterations to the façade of the building other than to reinstate original features. The principal room layout and planning configuration as well as significant internal original features including ceilings, cornices, joinery, flooring and fireplaces should be retained and conserved. Any additions and alterations should be confined to the rear in areas of less significance, should not be visibly prominent and shall be in accordance with the relevant planning controls.

The HIS states that the proposal is for much needed conservation works to the facade of the Main School and School Hall buildings. These works will restore both a) the façades to a formerly known glory and most importantly b) public safety by removing the risk of failing masonry. No work to interiors, no building additions or modifications to existing façade configurations are included in this proposal.

The HIS concludes the following:

The proposal is for façade remediation works to the Main School Building and School Hall of *St Vincent's College, Potts Point, NSW.*

These works are urgently required to restore architectural detailing such as drip moulds that assist to shed water from the façade and meet a back-log of façade maintenance issues. The proposed works will ensure the rate of decay of the significant heritage fabric of the buildings is greatly reduced. Most importantly the proposed works will reduce the public safety risk of failing masonry in the future.

There will be no negative impacts upon the significant Victoria Street streetscape or the Heritage items in the vicinity of the College.

The proposed remediation works are supported in heritage terms by compliance with the aims and intentions of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter), the aims and intentions of the Conservation Policies for St Vincent's College (Ruth Daniell 2010) and in accordance with the State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation).

There will be no negative impacts upon the Main School Building and the School Hall. The remediation works will enhance the significance and protect the fabric for the future.

The proposed remediation works are worthy of support.

It is considered that the proposal will conserve the heritage significance of the subject site and its vicinity, and therefore will not have a negative heritage environmental impact.

A copy of the HIS is provided in Appendix A.

Mitigation Measures

- Notification of structural works and insertion of any new fabric to the NSW Heritage Council, together with an exemption form accompanied by the HIS.
- Appropriate heritage site induction of all workers/contractors is to occur prior to their commencement of works on site. All workers/contractors would be informed that the College buildings are identified as a local heritage items under the *Sydney LEP 2012*.
- All workers / contractors would be informed of their obligations under the *Heritage Act* 1977 and *National Parks and Wildlife Act* 1974, namely that it is illegal to disturb, damage, destroy a relic or heritage item without the prior approval of OEH.
- Historic and indigenous archaeological sites and relics are protected under the *Heritage Act* 1977 and *National Parks and Wildlife Act* 1974, respectively. In the event that any archaeological items or relics are discovered during the course of these works, work would cease in the affected area and OEH would be contacted.

5.1.5 Noise

The *Interim Construction Noise Guideline* (DECC 2009) has been developed to manage noise from construction works regulated by the EPA. Construction management levels for noise at residences are listed in Chapter 4 (Table 2) of the guideline. The *Interim Construction Noise Guideline* (DECC 2009) states that construction works with a duration of more than three weeks should be subject to a quantitative assessment of noise impacts.

Within the College there may be many potential sensitive receivers (students and teachers) and therefore it would be necessary for consultation to be undertaken by the proponent or their representative (e.g. contractor) with the management of the College to identify the sensitive receivers, specific curriculum periods (e.g. trial exams, final HSC Exams and other assessments) and to determine the potential impact on their operations. Appropriate noise and vibration control measures can then be identified (if required).

Other sensitive receptors are located in adjoining lots and on the other side of adjoining streets.

It is noted that noise levels would vary depending on the nature of the activities being undertaken and that the use of several items of construction equipment simultaneously is only expected to occur intermittently. The noisiest works would be associated with sandstone removal.

The *Interim Construction Noise Guideline* (DECCW 2009) states that, where noise is above highly noise affected level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account:

• times identified by the College when they are less sensitive to noise (e.g. lunch and recess).

Control measures to minimise noise impacts would be documented in a specific Noise Management Plan to be implemented during construction. This would form part of the contractor's CEMP, which would be required to be submitted for approval prior to commencement of works. This should include consideration of Tables 4 - 10 in *Interim Construction Noise Guideline* (DECC, 2009), which presents a summary of options for work practices with lower noise impacts. The Noise Management Plan for the works would address site specific issues, including noise reduction practices, so as to minimise impacts to users of the College.

All feasible and reasonable works practices would be implemented to reduce construction noise levels and discussed with the users of the College prior to works commencing.

Mitigation Measures

- A Noise Control Plan would be prepared by the contractor for inclusion in the CEMP. Consultation would be undertaken by the contractor with the Management of the College to identify the sensitive receivers within the College, including examination times, and to determine the potential impact on their operations. Appropriate noise and vibration control measures can then be identified (if required. The CEMP would be required to be submitted for approval by the College prior to commencement of works.
- The Noise Control Plan would include as a minimum:
 - During construction, implement all reasonable and practical control measures to minimise noise and vibration impacts during construction. These measures would be specific to the site conditions and proposed work methods. The Interim Construction Noise Guideline (DECCW, 2009) (in particular Tables 4 – 10 of this guideline) should be referred to when considering appropriate measures, which may include:
 - Optimum siting of work areas, vehicle and plant parking areas, materials stockpiles and equipment storage areas in locations where potential acoustic impacts would be minimised; and
 - Identify locations where noise is most intrusive and develop strategies to reduce impacts for these areas.
 - The contractor would take all reasonable steps to minimise noise and vibration arising from construction works.
 - Construction activities would be generally limited to:
 - Monday to Saturdays 7.00 am to 5.00 pm;
 - No works would be undertaken on Sundays or public holidays. However where a crane is required for the works and a permit has been obtained from the Council transport of the crane may be required outside these hours in accordance with the requirements of Council.
 - All plant and machinery used for the project would be well maintained.
 - All possible steps would be taken to ensure construction equipment is operated to manufacturer's specifications.
 - Any noise complaint received would be investigated as soon as practicable. Any practicable and feasible measures to minimise noise would be identified. The complainant would be advised of the outcome.

5.1.6 Air Quality

Airborne dust may occur. Methods to suppress potential dust would be included in the CEMP to minimise dust formation and maintain a suitable level of air quality. Specifically methods would be required to control dust if the building is being used by students during the works in other parts of the building or to the exterior facades.

Local air quality may be affected by emissions from construction traffic including trucks transporting materials to and around the site.

Vehicles, plant and equipment used during construction would be required to be serviced prior to use at the works site and be monitored to ensure they do not emit unacceptable levels of smoke and fumes. They would be required to meet emission levels set by the EPA.

Mitigation Measures

- An Air Quality Plan would be prepared for inclusion in the CEMP.
- The Air Quality Plan would include the following as a minimum:
 - The contactor would ensure that works are undertaken to minimise dust, smoke, mortar dust and other objectionable matter into the atmosphere.
 - The contractor would take all proper precautions to minimise any nuisance arising from dust caused by the construction activities. Methods to suppress potential dust would be included in the CEMP to minimise dust formation and maintain a suitable level of air quality.
 - Undertake community notification where work is likely to cause dust impact on the public and nearby residents.
 - Only spray paint and other materials with the potential to become air borne particulates in light wind conditions.
 - The burning of waste materials would not be permitted on site.
 - Construction vehicles and equipment would be suitably serviced within the six-month period prior to commencement of construction activities and all necessary maintenance undertaken during construction period.

5.1.7 Water Quality, Erosion and Sedimentation

The main construction activities with the potential to cause water quality impacts include;

- Excavation works related to fence.
- Temporary stockpiling of construction materials and equipment

Provided the mitigation measures as detailed below are implemented, the water quality objectives for the College works site should be met.

Mitigation Measures

- All care and due diligence would be taken to minimise or prevent pollutant material entering drain inlets or waterways.
- Where required, an Erosion and Sedimentation Control Plan would be prepared and implemented as necessary and would incorporate appropriate erosion and sediment control measures e.g. socks around inlets, silt fences etc, in accordance with Landcom's "Managing Urban Stormwater, Soils & Construction Guidelines (The Blue Book)".

5.1.8 Plant and Equipment

Construction equipment would include the following or similar equipment as required:

- Light commercial and passenger vehicles (including a light truck for delivery and removal of materials, utility vehicle and trailer);
- Concrete agitator truck (if required),
 - Chain saws, jackhammers and pneumatic hand tools

Mitigation Measures

- In accordance with WorkCover all plant and equipment used in construction work must comply with the relevant Australian Standards and manufacturer specifications.
- No vehicle maintenance would be permitted in the demolition and construction areas except in emergencies.
- All machinery would be secured against vandalism outside working hours.

5.1.9 Waste Management

The main waste material to result from the proposed stonework and seismic strengthening construction works would consist of stones, stone fragments, wood and metal.

The other source of waste would be general miscellaneous construction waste, such as off cuts, packaging etc. Bins for personnel waste would be provided at the construction work sites. All waste would be taken off site for reuse or disposal. Construction staff would be provided with portable toilets.

Mitigation Measures

- The contractor undertaking the works shall detail waste management procedures in a Waste Management Plan (WMP) to be incorporated into the CEMP. The contractor would be responsible for the regular, safe and efficient disposal of all solid, liquid and gaseous contaminants and waste generated on site.
- The WMP would adopt the objectives of the *Waste Avoidance and Resource Recovery Act* 2001, namely, to encourage the most efficient use of resources, to reduce environmental harm, and to provide for the continual reduction in waste generation in line with the principles of environmentally sustainable development (ESD).
- The WMP would also need to be consistent with the Waste Classification Guidelines (DECCW 2009) in that all waste removed from the site is to be classified and disposed of appropriately.
- The WMP is to include:
 - \circ details of, and the waste management action proposed for each type of waste
 - \circ procedures that ensure the waste is transported to a lawful place
 - a description of the roles and responsibilities of everyone who manages the waste, including the site supervisor and sub-contractors.
- All waste, would be recycled if practicable or alternatively taken to a licensed waste disposal facility.
- Solid waste materials including garbage would be collected in steel containers and transported off the site to an approved waste disposal facility. Waste receptacles for recyclable and non-recyclable waste are to be provided for personnel waste.
- The worksite would be left tidy and rubbish free each day prior to leaving site and at the completion of the works.

5.1.10 Flora and Fauna

No vegetation will be impacted by the proposed work to the two buildings.

The fencing repairs do not require the removal of any trees, and if any pruning is required an arborists report will be required.

The construction works would occupy a small area of the College at any one time.

It is not anticipated that any fauna will be impacted.

It is therefore assessed that the proposal will have negligible impact on terrestrial fauna or fauna habitat and that a Species Impact Statement or referral to the Commonwealth Department of the Environment is not required.

Mitigation Measures

- Appropriate tree protection measures for any trees to be retained would be put in place prior to any works on the site. Tree protection fences would be installed around trees or groups of trees to be retained that are located within 10 metres of the proposed works and within 10 metres of any temporary construction compound.
- Environmental resources would be maximised by retention of existing vegetation and resources where possible, including minimising vegetation disturbance.
- Vehicles, machinery or stockpiles would not be placed beneath canopies of trees.
- If any pruning is required, an arborists report will be required to be obtained by the contractor and its recommendations included in the CEMP prior to any impact on the tree(s).

5.1.11 Utilities and Services

The proposed works would be located within the College grounds, and also to the boundary fence.

Location of utilities and services would need to be identified prior to any works, and a dial before you dig undertaken related to the proposed fencing work.

Mitigation Measures

 Accurately locate any services which may be impacted by the proposed works prior to commencement.

6. Conclusion

Pursuant to the provisions of the *Environmental Planning and Assessment Act 1979*, and *Environmental Planning and Assessment Regulation* 2000, an environmental impact assessment of the proposed works has been undertaken. Consideration has been given to the likely impact of the activity on the environment, having regard to all relevant factors.

The proposed stonework repairs are considered essential to ensure the long-term conservation of the Main School Building and Small School Hall at the St Vincent's College. The proposed works will provide a safer building environment, conserve the heritage stonework, and strengthen the buildings related to seismic events.

There would be only relatively minor environmental impacts as a result of the proposed works, and any impacts would be managed with the implementation of the safeguards listed in this REF.

Any impacts would be temporary and are considered not to be significant. The environmental safeguards are associated with potential environmental impacts including:

 public safety; traffic and access; cultural heritage; noise; air quality; water quality, erosion and sedimentation; plant and equipment; waste management; flora and fauna; and utilities and services.

The proposed works are not considered to have a significant impact on any threatened terrestrial species, populations or communities or their habitat.

The St Vincent's College is a local heritage item and Exemption Notification to the NSW Heritage Council related to the structural works and the insertion of any new fabric. Would be required prior to commencing works. A permit from the City of Sydney Council for a Mobile Hoisting Devices Operating from a Road/Footway Application is also required.

On the basis of the information presented in this REF, it is concluded that by adopting the safeguards identified in this assessment there would be no significant adverse environmental impacts associated with the proposed works and therefore an Environmental Impact Statement is not required.

It is also concluded that the proposal is not likely to affect Commonwealth land, be carried out on Commonwealth land or significantly affect any matter of national environmental significance.

It is recommended that the proposed works at St Vincent's College be approved subject to the preparation of a Construction Environmental Management Plan containing the mitigation measures listed in 7.2 to 7.12 of this REF.

7. Decision Statement

Determination

Name of Authorised Person (authorised by St Vincent's College to determine the proposed activity)	
Designation	
Organisation	St Vincent's College
Signature	
Date	

- A. I have considered the REF and have decided, on behalf of St Vincent's College, that:
 - (1) an Environmental Impact Statement is not required.
 - (2) a Species Impact Statement is not required.
- B. I determine that the proposed activity is approved, and may proceed subject to:
 - (1) the following approvals / notifications in Table 7.1;

Table 7.1: Approvals required prior to commencement of works

Agency	Requirements	Reference
NSW Heritage Council	Exemption Notification to the NSW Heritage Council related to the structural works and the insertion of any new fabric. Detailed drawings, an exemption form accompanied by the HIS would be required.	Section 57(2) of the Heritage Act
City of Sydney Council	Mobile Hoisting Devices Operating from a Road/Footway Application for a Permit	S68, LGA 1993 and S138, Roads Act 1993

- (2) Upon determining, placing the REF on the College web site; and
- (3) Preparation of a Construction Environmental Management Plan containing the mitigation measures listed below (7.2 to .7.12).

7.1 CEMP

- The CEMP would be developed for the proposed works incorporating the mitigation measures outlined in this REF and any other appropriate environmental management measures. The CEMP must be reviewed and approved by the College / Architect prior to the commencement of construction works. The College authorised representatives may carry out audits on the CEMP.
- The CEMP would indicate the names, responsibilities and authority of site management personnel who would have primary responsibility for implementing all environmental safeguards, monitoring effectiveness, rectifying environmental deficiencies, controlling further demolition activities until deficiencies were rectified and the keeping of environmental records. The CEMP would include provision for hold points where environmental damage may occur, regular reports and audits on the environmental management of the project, details of non-conformances, verification activities and emergency responses.
- Construction Environmental Management Plan would contain the mitigation measures listed below:

7.1.1 Land Use and Amenity

Objective(s)

• To minimise the impacts to land use and amenity of Thomas Walker Hospital foreshore.

Action/Phase	Responsibility
Pre-construction	
Detailed construction planning is to be undertaken to ensure the impact to users (students, teachers, parents and visitors) of St Vincent's College.	Contractor
The contractor is to develop a Communication Plan detailing the consultation strategy to be implemented during the construction period. Related to the fence repairs.	Contractor
Signage would be provided and regularly updated to inform the College users and the public of the likely timing and programming of the works, changes to pathway/walkway access, detail areas where public access will be temporarily unavailable and other important safety information.	Contractor
Construction	
Work areas and surrounding areas would be kept clean and free from rubbish and debris during the entire construction period.	Contractor
All construction materials and equipment are to be stored within the construction compound.	Contractor
On completion of the work the contractor would remove all temporary scaffolding, depots, and facilities and reinstate the areas disturbed by the construction activities to a condition equivalent to or better than the pre- construction condition unless otherwise agreed to with St Vincent's College.	Contractor
Footpaths shall maintain uniform contours for safe walking.	Contractor

7.1.2 Public Safety

Objective(s)

• To protect the public and the construction personnel during the construction works.

Action/Phase	Responsibility
Pre-construction	
A Safety Management Plan would be prepared by the Contractor. The Contractor is to ensure that work is carried out at all times in a manner that is safe to users of the College, members of the public and the construction work force.	Contractor
The Safety Management Plan would address public safety and construction work safety including occupational health and safety risk mitigation measures in relation to workers during construction.	Contractor
Construction	
Signage would be provided and regularly updated to inform the users of the College and the public of the likely timing and programming of the construction works, detail areas where access will be temporarily unavailable and other important safety information.	Contractor
Signage to be approved by St Vincent's College prior to being erected.	Contractor and St Vincent's College
The work site is to be made safe, kept tidy and equipment stowed in a secure state outside of normal work hours.	Contractor
Provide a fully enclosed scaffold and site area, including amenities compound with temporary construction fencing.	Contractor
The construction area would be cordoned off and out of bounds to staff, visitors and students for the duration of the construction activities.	Contractor
Carry out all works in compliance with the requirements of WorkCover NSW and the provisions of the <i>Work Health and Safety Act 2011</i> and Work Health and Safety Regulation 2011, to ensure the safety of staff, students, visitors and the general public.	Contractor
In accordance with WorkCover requirements, all plant and equipment used in construction work must comply with the relevant Australian Standards and manufacturer specifications.	Contractor
Do not lift loads over occupied areas, with any such activities to be undertaken out of College hours or with the relocation of students/staff in co-ordination with the College	Contractor
Record and attend to any community complaints promptly. On receiving a complaint, works would be reviewed to determine whether issues relating to the complaint can be avoided or minimised. Feedback would be provided to the complainant explaining what remedial actions were taken.	Contractor

7.1.3 Traffic and Access

Objective(s)

- Ensure that construction vehicles do not cause excessive inconvenience to road and pedestrian users.
- Ensure the safety of road users and construction personnel for the duration of the works.
- Minimise the pollution impacts resulting from the use of vehicles during construction.

Action/Phase		Responsibility
Pre-construction		
A Traffic Management Plan prepared by the Contractor to behalf of the College prior works. The TMP is to include to minimise traffic impacts en safety.	(TMP) as part of the CEMP would be to be reviewed and approved by or on to commencement of the construction appropriate and site specific measures sure students, worker visitor and public	
The TMP is to be prepared ir	accordance with:	
o RMS's Traffic Control	at Work Sites Manual, Issued 2010, and	
 Australian Standard for Works on Roads. 	1742.3 - 2002 Traffic Control Devices	
The TMP would cover all management at the site with construction work on safety, ar areas. The TMP would include, but no	aspects of public access and traffic the aim of minimising the impact of the ad the existing traffic flow and public access of limited to describing the methods for:	
 Materials delive 	ry and stockpiling at the site;	
 Transportation of 	of materials to the site of works/installation;	
\circ Safe entry and	egress from the site,	
 Confirmation of and number of f 	truck movements including traffic routes rruck journeys;	
 Methods to en public and cons 	sure safety to users of the College, the truction workers;	
 Minimising any impacts to pede area; 	reduction in existing parking as well as estrian access adjacent to the fence repair	
 Keeping all road 	ds free of mud and dust	
 Compliance with including speed 	h applicable traffic laws and regulations limits	
 Compliance w grounds 	th College speed limts within school	

Action/Phase	Responsibility
Undertake dilapidation reporting of Council assets (e.g. guttering, kerbs and footpaths) prior to and following completion of the works. Restore any damaged areas to pre-construction condition upon completion of the construction works.	
Construction	
No vehicle maintenance would be permitted in the construction areas except in emergencies.	
Post construction any roads or footpaths impacted by the works would be returned to a condition equivalent to or better than its prior condition.	

7.1.4 Cultural Heritage

Objective(s)

• Minimise potential impacts to items and places of Aboriginal heritage due to the works

Action(s)

Action/Phase	Responsibility
Pre-construction	
Send an exemption notification to NSW Heritage Council in relation to proposed structural works (seismic) and insertion of any new fabric to the, together with a copy of the HIS	Architect / St Vincent's College
Appropriate heritage site induction of all workers/contractors is to occur prior to their commencement of works on site. All workers/contractors would be informed that the College buildings are identified as a local heritage items under the <i>Sydney LEP 2012</i> .	Contractor / Architect
All workers / contractors would be informed of their obligations under the <i>Heritage Act 1977</i> and <i>National Parks and Wildlife Act 1974</i> , namely that it is illegal to disturb, damage, destroy a relic or heritage item without the prior approval of OEH.	Contractor / Architect
Construction	
Historic and indigenous archaeological sites and relics are protected under the <i>Heritage Act 1977</i> and <i>National Parks and Wildlife Act 1974</i> , respectively. In the event that any archaeological items or relics are discovered during the course of these works, work would cease in the affected area and OEH would be contacted.	Contractor

7.1.5 Noise

Objective(s)

• Compliance with relevant recommendations specified in the *Interim Construction Noise Guideline* (DECC, 2009).

• Avoidance/minimisation of noise impacts on nearby sensitive noise receivers.

Action/Phase	Responsibility
Construction	
A Noise Control Plan would be prepared by the contractor for inclusion in the CEMP. Consultation would be undertaken by the contractor with the Management of the College to identify the sensitive receivers within the College, including examination times, and to determine the potential impact on their operations. Appropriate noise and vibration control measures can then be identified (if required. The Noise Control Plan would be required to be submitted for approval	Contractor
by the College prior to works commencing.	
 The Noise Control Plan would include as a minimum: During construction, implement all reasonable and practical control measures to minimise noise and vibration impacts during construction. These measures would be specific to the site conditions and proposed work methods. The Interim Construction Noise Guideline (DECCW, 2009) (in particular Tables 4 – 10 of this guideline) should be referred to when considering appropriate measures, which may include: 	Contractor
 Optimum siting of work areas, vehicle and plant parking areas, materials stockpiles and equipment storage areas in locations where potential acoustic impacts would be minimised; and Identify locations where noise is most intrusive and develop strategies to reduce impacts for these areas. 	
The contractor would take all reasonable steps to minimise noise and vibration arising from construction works	Contractor
Construction activities would be generally limited to:	Contractor
 Monday to Saturdays – 7.00 am to 5.00 pm; 	
• No works would be undertaken on Sundays or public holidays. However, where a crane is required for the works and a permit has been obtained from the Council transport of the crane may be required outside these hours in accordance with the requirements of Council.	
All plant and machinery used for the project would be well maintained.	Contractor
All possible steps would be taken to ensure construction equipment is operated to manufacturer's specifications.	Contractor
Any noise complaint received would be investigated as soon as practicable. Any practicable and feasible measures to minimise noise would be identified. The complainant would be advised of the outcome.	Contractor

7.1.6 Air Quality

Objective(s)

- Avoidance/minimisation of off-site dust nuisance to neighbouring residences and the community.
- Minimisation of air quality impacts resulting from machinery and vehicle emissions.

Action(s)

Action/Phase	Responsibility	
Pre-construction		
An Air Quality Plan would be prepared for inclusion in the CEMP.	Contractor	
The Air Quality Plan would include the following as a minimum:	Contractor	
• The contactor would ensure that works are undertaken to minimise dust, smoke, mortar dust and other objectionable matter into the atmosphere.		
• The contractor would take all proper precautions to minimise any nuisance arising from dust caused by the construction activities. Methods to suppress potential dust would be included in the CEMP to minimise dust formation and maintain a suitable level of air quality.		
• Undertake community notification where work is likely to cause dust impact on the public and nearby residents.		
• Only spray paint and other materials with the potential to become air borne particulates in light wind conditions.		
• The burning of waste materials would not be permitted on site.		
Construction		
Construction vehicles and equipment would be suitably serviced within the six-month period prior to commencement of construction activities and all necessary maintenance	Contractor	

7.1.7 Water Quality, Erosion and Sedimentation

Objective(s)

• To effectively manage sediment and erosion control during the construction stage of the project.

Action(s)

Action/Phase	Responsibility
Construction	
All care and due diligence would be taken to minimise or prevent pollutant material entering drain inlets or waterways.	Contractor
Where required, an Erosion and Sedimentation Control Plan would be prepared and implemented as necessary and would incorporate appropriate erosion and sediment control measures e.g. socks around inlets, silt fences etc, in accordance with Landcom's "Managing Urban Stormwater, Soils	Contractor

7.1.8 Plant and Equipment

Objective(s)

• To ensure appropriate location and use of plant and equipment associated with the proposed works.

Action(s)

Action/Phase	Responsibility
Construction	
In accordance with WorkCover all plant and equipment used in construction work must comply with the relevant Australian Standards and manufacturer specifications.	Contractor
No vehicle maintenance would be permitted in the demolition and construction areas except in emergencies.	Contractor
All machinery would be secured against vandalism outside working hours.	Contractor

7.1.9 Waste Management

Objective(s)

- Compliance the provisions of the *Protection of the Environment Operations (Waste) Regulation* 2005.
- Maximise reuse/recycling of waste material and minimise waste disposed of to landfill.

Action/Phase	Responsibility
Pre-construction	

Action/Phase	Responsibility
The contractor undertaking the works shall detail waste management procedures in a Waste Management Plan (WMP) to be incorporated into the CEMP. The contractor would be responsible for the regular, safe and efficient disposal of all solid, liquid and gaseous contaminants and waste generated on site.	Contractor
The WMP would adopt the objectives of the <i>Waste Avoidance and Resource Recovery Act</i> 2001, namely, to encourage the most efficient use of resources, to reduce environmental harm, and to provide for the continual reduction in waste generation in line with the principles of environmentally sustainable development (ESD).	Contractor
The WMP would also need to be consistent with the <i>Waste Classification Guidelines</i> (DECCW 2009) in that all waste removed from the site is to be classified and disposed of appropriately.	Contractor
The WMP is to include:	Contractor
 details of, and the waste management action proposed for each type of waste 	
 procedures that ensure the waste is transported to a lawful place 	
• a description of the roles and responsibilities of everyone who manages the waste, including the site supervisor and sub-contractors.	
Construction	
All waste, would be recycled if practicable or alternatively taken to a licensed waste disposal facility.	Contractor
Solid waste materials including garbage would be collected in steel containers and transported off the site to an approved waste disposal facility. Waste receptacles for recyclable and non-recyclable waste are to be provided for personnel waste.	Contractor
The worksite would be left tidy and rubbish free each day prior to leaving site and at the completion of the works.	Contractor

7.1.10 Flora and Fauna

Objective(s)

- To minimise impacts on flora and fauna
- Avoidance of weed invasion

Action/Phase	Responsibility
Pre-construction	

Action/Phase	Responsibility
Appropriate tree protection measures for any trees to be retained would be put in place prior to any works on the site. Tree protection fences would be installed around trees or groups of trees to be retained that are located within 10 metres of the proposed works and within 10 metres of any temporary construction compound.	Contractor
Construction	
Environmental resources would be maximised by retention of existing vegetation and resources where possible, including minimising vegetation disturbance.	Contractor
Vehicles, machinery or stockpiles would not be placed beneath canopies of trees.	Contractor
If any pruning is required, an arborists report will be required to be obtained by the contractor and its recommendations included in the CEMP prior to any impact on the tree(s).	Contractor

7.1.11 Utilities and Service

Objective(s)

• Protect and connect to existing utilities and services

Action/Phase	Responsibility
Pre-construction	
Accurately locate any services which may be impacted by the proposed works prior to commencement.	Contractor

8.References

Australian Standard (2010) AS2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites

Australian Standard (2002) AS1742.3 - 2002 Traffic Control Devices for Works on Roads.

DECCW (2010) Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales

Department of Environment and Climate Change (2008a). *Managing Urban Stormwater: Soils and Construction Volume 2C*. NSW Government.

DECCW (2009) Waste Classification Guidelines, NSW Government

Landcom's Blue Book Volume 1 (2004), Managing Urban Stormwater: Soils and Construction – Volume 1,4th Edition, reprinted July 2006

NSW Department of Environment, Climate Change and Water (DECCW, 2009) *Interim Construction Noise Guideline*

Sandstone Condition Assessment and Remediation Advice, St Vincent's College, Potts Point NSW, Heritage 21, April 2016

Shreeii Structural Civil Engineers Report, 18 January 2018

St Vincent's College Statement of Heritage Impact, Craftech Heritage Services Pty Ltd 2018

Appendix A – Consideration of Clause 228

Table A-1 Factors for Consideration under Clause 228 of Environmental Planning and Assessment Regulation 2000

Factor	Impact Assessment	Mitigation Actions
Any environmental impact on a community?	Community impacts would comprise construction related impacts associated with public safety; traffic and access; cultural heritage; noise; air quality; water quality, erosion and sedimentation; plant and equipment; waste management; flora and fauna; and utilities and services	Refer to Section 5
	For the majority of the works period noise would primarily be generated by stonemasons' hand tooling of stone, with minimal use of powered tools such as pointing mixers and cranes. Where works occur during the operation of the school, noisier works should be undertaken outside school/classroom hours in co-ordination with the school.	
	Impacts to traffic, access and air quality would be managed by the implementation of appropriate mitigation measures outlined in Section 5.	
	A positive impact is predicted post construction at the school, due to the ongoing preservation of the school buildings, improved structural stability and their heritage value.	
Any transformation of a locality?	No. The proposed works would be minor mainly comprise the stonework repairs and strengthening of existing buildings located within the grounds of an existing functional school	None required
	There would be no transformation of the locality as the works would mainly comprise repair of the existing buildings.	
Any environmental impact on the ecosystems of the locality?	No trees are proposed to be removed as part of the proposed works. Tree retention measures have been proposed to ensure the protection of retained trees within the site.	Refer to Section 5
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	No. The works would comprise external stonework repairs and internal structural strengthening of the existing buildings and therefore may have a long term positive impact on the visual qualities of the buildings.	Refer to Section 5
Any effect on a locality, place or building having aesthetic,	No. St Vincent's College is not listed as a heritage item on the State Heritage Register. It is listed as a local heritage item or and is located within a conservation area under the <i>Sydney Local Environmental Plan 2012.</i>	Refer to Section 5 and Appendix C
anthropological, archaeological, architectural, cultural,	A HIS has been prepared for the proposed work which recommended that the works proceed.	
historical, scientific or social significance or	The proposed works would have a positive heritage impact post construction, due to the ongoing preservation of the school buildings and improved structural stability.	

Factor	Impact Assessment	Mitigation Actions
other special value for present or future generations?		
Any impact on the habitat of any protected fauna (within the meaning of the <i>National Parks</i> and <i>Wildlife Act</i> 1974)?	No.	Refer to Section 5
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	No.	Refer to Section 5
Any long-term effects on the environment?	No.	Refer to Section 5
Any degradation of the quality of the environment?	Construction works may result in a moderate increase in noise and air pollution. However, this impact would not be significant in a local context due to the temporary nature of the construction works (also see (a) above).	Refer to section 5
Any risk to the safety of the environment?	The proposed works may occur during school operation. As such there may be a minor and temporary increase in the risk to the safety of students and staff due to the presence of vehicles and machinery, and to the public in relation to cranes. Management measures would be implemented to minimise any impacts to safety, including the provision of fully enclosed site area and temporary fencing. A permit from the City of Sydney Council would be required for the crane. Consultation should be undertaken with the school in relation to any disruption to school operations.	Refer to Section 5
Any reduction in the range of beneficial uses of the environment?	No. The proposed stonework repairs and seismic stabilisation works would maintain the beneficial use of the environment through the improvement of facilities at the school.	None required
Any pollution of the environment?	No pollution or contamination is anticipated during the construction works. Proposed stonework repairs and seismic stabilisation works involve both external and internal structural works to the existing buildings. Mitigation measures in relation to air, noise and water pollution and waste have been provided.	Refer to Section 5
Any environmental problems associated with	No. Stone waste would be generated due to the works. There may be a minor amount of excess building waste that would require	Refer to Section 5

Factor	Impact Assessment	Mitigation Actions
the disposal of waste?	disposal. A Waste Management Plan would be prepared to minimise waste impacts.	
Any increased demands on resources (natural or otherwise) which are, or are likely to become, in short supply?	No. The proposal will not increase the staff/student numbers at St Vincent's College.	None required
Any cumulative environmental effect with other existing or likely future activities?	None anticipated.	None required
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	No. The works will not impact on coastal processes as the school is not located in the coastal zone.	None required.

Appendix B – Consultation and Response



31 July, 2018

Chief Executive Officer City of Sydney GPO Box 1591 SYDNEY NSW 2001

Dear Ms Barone

St Vincent's College Conservation Repairs - 1 Challis Crescent Potts Point

St Vincent's College is proposing to undertake conservation repairs to both the Mary Aikenhead Building and the St Dominics Building.

The environmental impact assessment, in the form of a Review of Environmental Factors [REF] is being prepared under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), where St Vincent's College is both the proponent and determining authority.

Although mandatory consultation is not required either under Clause 11 of the State Environmental Planning Policy (Educational Establishments and Oxid Core Facilities 2017 (Education SEPP), or clause 3.3.3 of the NSW Cade of Practice for Part 5 Activities for Registered Nan government Schools 2017 (the Code), we nevertheless wish to inform you of the proposed activity.

Please note that a Heritage Impact Statement (HIS) and a REF are both under preparation, and the REF will be made available on St Vincent's College web site in accordance with clause 3.3.3 of the Code. Please note that the proposed activity is defined as "Class 1 Works (minor School Development Works) under the Code.

The proposed works include:

- Stone replacement and stone indents
- Introduction of lead seat hinges and reprinting,
- Seismic stabilisation to all chimneys and gables
- Partial rebuilding of boundary wall on Victoria Street between the two buildings with the existing material.

If you have any questions or comments to make regarcing the proposed works, please do not hesitate to contact Ms Vivian Sioutas, Architect on 0418 252 CO0, or myself on 9368 1611.

Yours sincerely

Christopher Zielonka Business Manager



St Vincent's College Lucked Bag 1700, Pats Pain, NSW 1335 Australia T 02 9368 1611 || F 02 9255 2118 || www.stvincents.nsw.cdc.au ABN 97 056 777 922 From: **Vivian Sioutas** <viviansioutas.architecture@gmail.com> Date: Wed, 12 Sep 2018 at 3:00 pm Subject: Re: Statement of heritage impact: St Vincents College To: <SShepherd1@cityofsydney.nsw.gov.au> Cc: goldinassoc <goldinassoc@optusnet.com.au>, Christopher Zielonka <zielonkac@stvincents.nsw.edu.au>, <craftechheritage@gmail.com>

Dear Sally,

Please find the draft REF for your information.

Regards,



RESIDENTIAL HERITAGE & PUBLIC BUILDINGS

ABN 72 612 588 520 ACN 612 588 520 ARN 8260

M 0418 252 000

E viviansioutas.architecture@gmail.com

On Tue, Sep 11, 2018 at 4:51 PM Sally Shepherd <SShepherd1@cityofsydney.nsw.gov.au> wrote:

Hi Vivian,

Thanks for this – I have passed on the additional information to Hendry and will be in touch if anything further is required.

Kind regards,

Sally Shepherd Planner Planning Assessments

Telephone: +612 9265 9749 cityofsydney.nsw.gov.au

From: Vivian Sioutas <viviansioutas.architecture@gmail.com>
Sent: Monday, 10 September 2018 12:03 PM
To: Sally Shepherd <SShepherd1@cityofsydney.nsw.gov.au>
Cc: goldinassoc <goldinassoc@optusnet.com.au>; Christopher Zielonka
<zielonkac@stvincents.nsw.edu.au>; craftechheritage@gmail.com
Subject: Re: Statement of heritage impact: St Vincents College

Dear Sally,

The package of works is being submitted to the client on the 17th of September. I have attached the drawings separately for review.

The works in brief are sandstone replacement, installation of lead weatherings, repointing and synthetic repairs were required as well as seismic and structural strengthening to bring the building up to code.

Do you also require the seismic stabilisation drawings? these works are all internal and not visible from the street or external facades at all.

The client as are we the team happy to take comments on board the works will not go to tender until your comments come back to us. However the stone conservation project is excaltly like any other Government school or health project carried under the Ministers stonework program. The team that has prepared and document this project with the same conservation approach and methodology it is the same team that has prepared documents such as Cleveland street PS, Crown street PS, Glebe PS, Bondi Beach PS, Bourke street public School and Greta Public school to name a few.

If required I am happy to talk or meet with Hendri to discuss the project.

Regards,

VIVIAN SIOUTAS ARCHITECTURE

RESIDENTIAL HERITAGE & PUBLIC BUILDINGS

ABN 72 612 588 520 ACN 612 588 520 ARN 8260

M 0418 252 000

E viviansioutas.architecture@gmail.com

On Mon, Sep 10, 2018 at 9:36 AM Sally Shepherd <SShepherd1@cityofsydney.nsw.gov.au> wrote:

Dear Vivian,

Hendry has reviewed the documents and has asked the following:

• What are the works being proposed under the current proposed activity?

• Can the relevant drawings/plans be isolated and be provided separately to expedite reference and review?

• It is understood that the City of Sydney is being informed out of courtesy because mandatory consultation is not required. However, is there a deadline or timeframe for submission of City of Sydney comments?

Please could you review and provide a response.

Kind regards,

Sally Shepherd Planner Planning Assessments

Telephone: +612 9265 9749 cityofsydney.nsw.gov.au

From: Sally Shepherd
Sent: Friday, 31 August 2018 2:44 PM
To: 'Vivian Sioutas' <viviansioutas.architecture@gmail.com>; goldinassoc
<goldinassoc@optusnet.com.au>; Christopher Zielonka <zielonkac@stvincents.nsw.edu.au>; craftechheritage@gmail.com
Subject: RE: STatement of heritage impact: St Vincents College

Dear Vivian,

Thanks for sending the Heritage Impact Statement through – I have passed this on to Hendry and will let you know if he has any comments.

Kind regards,

Sally Shepherd Planner Planning Assessments

Telephone: +612 9265 9749 cityofsydney.nsw.gov.au

From: Vivian Sioutas <viviansioutas.architecture@gmail.com>
Sent: Friday, 31 August 2018 12:30 PM
To: Sally Shepherd <SShepherd1@cityofsydney.nsw.gov.au>; goldinassoc

<goldinassoc@optusnet.com.au>; Christopher Zielonka <zielonkac@stvincents.nsw.edu.au>; craftechheritage@gmail.com **Subject:** STatement of heritage impact: St Vincents College

Dear Sally,

ST VINCENTS COLLEGE, POTTS POINT

It was a pleasure discussing the St. Vincent's College Conservation Project with you. As discussed it is one of the first schools to be submitted under the new SEPP policy and we look forward to the smooth process.

As requested I have attached the Statement of Heritage Impact statement for your heritage advisor Hendry Wan.

Our planner Penny Goldin is preparing the REF and is happy to discuss any planning requirements under the legislation.

Please let me know if I can answer any further questions.

Kind regards,



RESIDENTIAL HERITAGE & PUBLIC BUILDINGS

ABN 72 612 588 520 ACN 612 588 520 ARN 8260

M 0418 252 000

E viviansioutas.architecture@gmail.com

--

Vivian Sioutas

Principal architect VSArchitecture

Bach UTS ARN 8260 Residential.heritage.publicbuildings.interiors

Email sent using Optus Webmail

Appendix C – Heritage Impact Statement

St Vincent's College Statement of Heritage Impact

Proposed conservation recommendations August 2018



Prepared for VIVIAN SIOUTAS ARCHITECTS

Prepared by

CRAFTECH HERITAGE SERVICES

PTY LTD

PO Box 192 Lawson, NSW 2783 ABN 52 619 704 728 craftechheritage@gmail.com

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Disclaimer and copyright

This report is based on information available at the time of its preparation and as provided on good faith to the author. This report does not guarantee support from NSW Heritage Council or Local Council on heritage grounds or any approvals.

This report has been prepared for Vivian Sioutas Architects for the purposes of accompanying a remediation works application to the NSW Heritage Council in August 2018 and is not relevant to or to be used for any other purpose.

Figure 1

Cover image Provided By Clytemnestra, 6 September 2010 https://commons.wikimedia.org/w/index.php?curid=11397774
1. Introduction

1.1. The brief

In July 2018 CRAFTECH Heritage Services Pty Ltd were commissioned by Vivian Sioutas Architects to prepare a Heritage Impact Statement for the proposed maintenance and restoration works at the St Vincent's College, Potts Point Sydney. The purpose of this report is to analyse the proposed works and the potential impacts on the heritage significance of the significant college buildings (the Main School Building and the School Hall Building) within its context as a significant historic college campus.

1.2. Approach and Methodology

The methodology used in the preparation of this Statement of Heritage Impact is in accordance with the principles and definitions as set out in the guidelines to the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance- The Burra Charter and the latest version of the NSW Office of Environment and Heritage Statement of Heritage Impact guidelines, accessed July 2017.

This Heritage Impact Statement (HIS) will review the relevant statutory heritage controls, assess the impact of the proposal on the subject property and make recommendations as to the level of impact.

1.3. Limitations

The site, the building and the interior of the subject property were inspected and photographed by Vivian Sioutas (heritage architect) on the 18th July 2017. The inspection was a safety audit conducted via elevated work platform and sissorlift.

The historical overview provides sufficient historical background to provide an understanding of the place in order to assess the significance and provide relevant recommendations, however, it is not intended as an exhaustive history of the site.

1.4. Author identification

This Heritage Impact Statement has been prepared by Craftech Heritage Services Pty Ltd: Katie Hicks Heritage Consultant

Information was sourced for this report from:

- Listing Sheet for the property, <u>www.heritage.nsw.gov.au</u> <u>http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2</u> <u>421381</u>
- Vivian Sioutas Architects (VSA) Condition Inspection and Safety Audit, conservation recommendations, St Vincent's College (January 2018)
- Heritage 21, Job no. 2511 Sandstone condition assessment and remediation advice – St Vincent's College
- Conservation Management Plan, St Vincent's College, Victoria Street Potts Point Ruth Daniell (December 2010)
- Google Maps, https://www.google.com.au/maps
- Six Maps, https://maps.six.nsw.gov.au/

1.5. Terminology

The terminology in this report follows definitions presented in The Burra Charter. Article 1 provides the following definitions:

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including components, fixtures, contents, and objects.

Conservation means all the processes of looking after a *place* so to retain its *cultural significance.*

Maintenance means the continuous protective care of the *fabric* and *setting* of a *place*, and is to be distinguished from repair. Repair involves restoration or reconstruction.

Preservation means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.

Restoration means returning the existing *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Reconstruction means returning the *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material into the *fabric*.

Adaptation means modifying a *place* to suit the existing use or a proposed use. Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use that respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

Setting means the area around a *place*, which may include the visual catchment.

Related place means a place that contributes to the cultural significance of another place

2. Site Location, Curtilage, Views and Description

2.1. Site Location



Figure 2

Map indicating location of St Vincent's College, Potts Point Sydney. (Source: Dept of Lands SIX viewer 19/08/18).



Figure 3 Aerial view with subject property outlined in red (Source: Dept of Lands SIX viewer 19/08/18).

The subject property is located at 1 Challis Avenue, Potts Point, NSW 2011. The two buildings identified in this HIS (the Main School Building and the School Hall Building) are located to the western boundary of the College Campus site.

2.2. Curtilage

The St Vincent's College is located in the suburb of Potts Point and is bounded by Victoria street, Challis Avenue and Rockwell Crescent. Also described as: Lot 1, DP 135902; Lots 11– 17, DP 2436; Lot 19, DP 975168; Lot X, DP 415506.

There are no proposed changes to the cUrtilage of the subject site. The proposed works will have no impact on the subject sites curtilage or subdivision.

2.3. Views

The proposed works to the facade of the building do not alter the footprint or envelope of the building. There will be no impact on views to or from the building. Any proposed changes to the facade will enhance the buildings contribution to its setting.

2.4. Description

Main School Building:

No. 54 - 78 Victoria Street Potts Point was designed by Sheerin & Hennessy, in 1885 and opened in December 1886. Sheerin & Hennessy were the architects commissioned by Cardinal Moran to build St Patrick's College at Manly, which was being constructed the same year as St Vincent's College. The Main Building is a three storey neo - Gothic building constrained by a narrow and rocky site. The building has distinctive bands of decorative pale sandstock brick contrasting with terracotta colour brick and Gothic sandstone details and trims to the windows and doors on the Victoria Street facade.

'The central steep pitched gabled feature with entrance door surmounted by sandstone inscription St Vincent's Convent displaying triple gothic windows, with miniature ones under the eave. On the ground and first floor were ten pairs of tall pointed arch windows, with indoor pulley ropes to open them, while the second floor had pairs of rectangular sash windows ... the sandstone chimneys in clusters of four added to the verticality of the building, and the roof ... was finished in slate. In the front hall of black and white marble tiles, the cedar staircase was beautifully lit by three stained glass windows with ascending base line.' This feature was altered when a brick extension made a new entrance on the garden side, in 1967. (Source: HIS Ruth Daniell 2010)

Small School Hall

Another late 19th Century building in the same Gothic Revival architectural style is located to the south of the 1886 Main Building, and on the Victoria Street frontage it is believed to be also by Sheerin & Hennessy, however the exact date of construction has not been established. The building is a simple brick with stone details and slate roof of two storeys. Its original function is not known at this stage, however for the purposes of this document it is called the 1886 Small School Hall Building.

Another building has been built onto the 1886 Hall this is also a two storey structure. The exact date of construction is not known however it appears to be c.1920. The ground floor of both the 1886 Hall and c.1920 building are currently used for storage, the rooms in the building are used for applied technology rooms.



Figure 4

Photograph showing the 1886 building c. 1910. (Source: Congregational Archives of the Sisters of Charity).

the Sisters of Charity).



Figure 5

An early woodcut of the north eastern end of the Victoria Street Schoolhouse undated, but late 19th century. The staircase with the crenulated parapet was demolished in 1938, when the adjoining building was constructed. (Source: Congregational Archives of



Figure 6

East West section of the 1886 Main School Building from the architectural drawings showing the 1966 additions to the 1886 building by Clement Glancy. The alteration removed the projecting bay, removed the eastern stained-glass window on the first floor and changed the original openings on the facade of the bay. The original timber stair was removed.

(Source: CMP Ruth Daniell 2010)

3. Statutory listings and controls

Heritage Status

The subject site is listed on the following statutory registers:

- NSW State Heritage Register, Database No. 2421381;
- Local Environmental Plan, Listing No. I1121

The subject site is listed on the following non-statutory registers:

• NSW National Trust Heritage Register.

3.1. NSW Heritage Act 1977

The site is included as an item of local significance in the OEH Heritage Register.

3.2. Local Environmental Plan

Sydney LEP 2012, Schedule 5 Environmental Heritage – ITEM INFORMATION				
Item I1121	St Vincent's Convent group including buildings and their interiors and grounds	1 Challis Avenue	Lots 11–17, DP 2436; Lot 1, DP 135902; Lot 19, DP 975168; Lot X, DP 415506	Local
Item I1122	Former convent "Bethania" and "Carmelita" (formerly 15–19 Challis Avenue) including interiors	1 Challis Avenue	Lot 1, DP 935719; Lot 10, DP 912103	Local

3.3. Development Control Plan

The Sydney DCP 2012 applies to the locale but the St Vincent's College will be reviewed under the new State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation), both of which commenced on 1 September 2017.

Therefore, there will be no requirement to lodge a development application with the local council. This is discussed further below (3.4 Planning Approvals)

3.4. Planning Approvals

1. The school relates to New SEPP (Education and Child Care) 2017.

The scope will be reviewed under the new State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation), both of which commenced on 1 September 2017.

This new SEPP provides a new planning approval pathway for private schools. Existing private schools that are registered non-government schools under the Education Act 1990 (NSW) can now carry out the subject proposal without the need to lodge a development application with the local council.

Private schools are now prescribed as public authorities for limited purposes including undertaking environmental impact assessments of certain types of works, including the proposed works. An existing private school is a determining authority for the purposes of

undertaking an environmental impact assessment under Part 5 of the Environmental Planning and Assessment Act 1979 for development (defined as an "activity" under Part 5) that may be carried out without consent on land within the boundaries of the existing school, pursuant to clause 36 of the new SEPP.

Clause 36 states:

36 Schools -development permitted without consent (note that the term "without consent" means without the consent of council, however consent is still required from the determining authority (the school) of the environmental impact assessment and if any other approvals are required such as under the Heritage Act)

36(1) Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school:

- (b) minor alterations or additions, such as:
 - (i) internal fitouts, or

(ii) alterations or additions to address work health and safety requirements or to provide access for people with a disability, or

(iii) alterations or additions to the external façade of a building that do not increase the building envelope (for example, porticos, balcony enclosure or covered walkways),

(c) restoration, replacement or repair of damaged buildings or structures.

All environmental assessments related to clause 36 of the SEPP must comply with the NSW Code of Practice for Part 5 Activities for Registered Non-Government Schools made by the Minister for Planning under the Regulation, and published in the New South Wales Government Gazette on 1 September 2017.

In relation to the proposal, the Code provides that various matters must be included in the environmental impact assessment (in the form of a Review of Environmental Factors (REF)), before the determining authority (the school) approves the proposal and signs off the environmental impact assessment.

The Code, for instance, provides that the REF is to be placed on the school's web site after approval. Various other matters are included in the Code, such as that the works need to comply with the BCA (now the National Construction Code) and a suitably qualified person needs to state that the works comply.

The Code includes other requirements, and these will be provided by the planner in a timely manner so that the school may comply. Note that an audit may be undertaken by the Government of any Part 5 assessments prepared by private schools.



3.5. Heritage items in the vicinity

Figure 7 Heritage Map – Sheet HER_021 Sydney LEP 2012 Map source: http://www.cityofsydney.nsw.gov.au/

The College is located within the Potts Point Heritage Conservation Area (C51) as stated under Schedule 5 of the Sydney Local Environmental Plan 2012 (SLEP 2012).

The College property includes two items of environmental heritage (11121 and 11122) as listed by the City of Sydney under Schedule 5 of the Sydney Local Environmental Plan 2012 (SLEP 2012).

Sydney LEP 2012, Schedule 5 Environmental Heritage – ITEM INFORMATION				
Item I1121	St Vincent's Convent group including buildings and their interiors and grounds	1 Challis Avenue	Lots 11–17, DP 2436; Lot 1, DP 135902; Lot 19, DP 975168; Lot X, DP 415506	Local
Item I1122	Former convent "Bethania" and "Carmelita" (formerly 15–19 Challis Avenue) including interiors	1 Challis Avenue	Lot 1, DP 935719; Lot 10, DP 912103	Local

The subject site is in the vicinity of several heritage items:

Item No.	Name	Address	Significance
00020	Rockwall	7 Rockwall Crescent Potts Point	State
00068	Terrace	55 Victoria Street Potts Point	State
I1126	Byrock & Uralla	21-23 Challis Avenue Potts Point	Local
I1124	Camelot Hall	2A Challis Avenue Potts Point	Local
I1123	Korein and Maroura	2-4 Challis Avenue Potts Point	Local
l1127	Highclere and Romney Hall	25-27 Challis Avenue Potts Point	Local
I1168	Edina	75 Victoria Street Potts Point	Local
l1173	Terrace house group	80-102 Victoria Street Potts Point	Local
l1154	Terrace house group	6-14 Rockwall Crescent Potts Point	Local
I1155	Terrace house group	16-20 Rockwall Crescent Potts Point	Local
l1152	Terrace house	2-4 Rockwall Crescent Potts Point	Local

3.6. Statement of Significance

The following statement of significance is sourced from the NSW OEH heritage listing sheet (https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2421381).

St Vincent's College is of historic significance for its long association with the historical development of Potts Point and with Tarmons, one of the earliest residences, and with the Sisters of Charity, the founding order of the school.

There are early historical associations with Sir Maurice O'Connell and Sir Charles Nicholson the first and second owners of the original Tarmons House.

The site is associated with a number of architects of note. The 1886 building was designed by prominent architects Sheering and Hennessey. The 1863 building was possibly designed by Government Architect Mortimer Lewis. The Chapel was designed by Dublin architect W.H. Byrne, with details transposed to Gothic details by Sydney architect Arthur Polin. The 1938 College Building was designed by Clement Glance Senior, an architect who designed a number of institutional buildings for the Catholic Church.

The Victoria street frontage of the buildings on the site have high aesthetic significance and landmark qualities, in particular the main 1866 building, smaller 1886 building on the southern and the 1938 building.

The main 1886 Victorian Gothic style building and the Small School Hall in the same style, and the 1901 Federation Gothic Revival Style red brick and sandstone building have high significance for their architecture.

Bethany on Challis Avenue has high aesthetic significance as a terrace group of building built in 1910 transitional from the Victorian Italianate architecture to the front façade to the Art Nouveau Interiors.

The 1938 building has medium significance for its inter-war architecture which references the Gothic Revival style of the 1886 school building and interpreted this style through modernist architectural influences.

St Vincent's College has strong associations with students and their families, staff and the Sisters of Charity and with numerous significant events over the years in tis operation as a school. St Vincent's School has strong association with the Sisters of Charity and with educational philosophy associated with the order which contributes to the contemporary esteem held by the college.

St Vincent's College, its site and fabric as an institution is important in demonstrating the development of the school founded by the Sisters of Charity that had its origins in 1853 and that has been operating as St Vincent's College since 1882.

The following assessment answers to the seven Criteria for Listing (NSW Heritage Office Criteria for Assessment of Cultural Significance) (Source: CMP Ruth Daniell 2010)

CRITERION A

An item is important in the course, pattern, of NSWs cultural or natural history (or the cultural or natural history of a local area).

The St Vincent's College has had a long association with the historical development of Potts Point and with 'Tarmons' one of the earliest residences and its setting, with the development and consolidation of a Catholic school founded and operated by the Sisters of Charity. The 1863, 1886, and 1901 chapel and buildings up to 1938 have particular historic significance as purpose-built school buildings reflecting the growth of the school.

CRITERION B

The item has strong and special associations with the life and work of a person or groups of persons of importance to NSW cultural or natural history (or the cultural or natural history of a local area).

The site is associated with the original land grant to John Busby in 1828 and the sale to Hamilton Collins Semphill in 1834. The original building on the site of St Vincent's College was 'Tarmons' house built in 1838. Tarmons is associated with Military Commander Sir Maurice O'Connell and Sir Charles Nicholson the subsequent owner. The site is associated with the Sisters of Charity and the operation of the original hospital they established in Tarmons between their purchase of the site on 1856 and 1870-71. The site is associated with the Sisters of Charity and the school they established in 1853, St Vincent's High School in 1870-71, and with St Vincent's college from 1882 to the present day.

CRITERION C

An item is important in demonstrating aesthetic characteristics and or/ a high degree of creative or technical achievement in NSW (or a local area).

The 1886 building and the 1901 chapel have high significance for their architecture. 'Bethania' on Challis Avenue has high aesthetic significance as a terrace group of buildings built in 1910 transitional from the Victorian Italianate architecture on the front façade to the Art Nouveau interiors. It has a landmark presence on Challis Avenue. The 1938 building has medium significance for its Inter war architecture, which referenced the Gothic revival style of the 1886 school building and interpreted this style through modernist architectural influences. The 1863 building externally has architectural significance and is possibly designed by the Government architect Mortimer Lewis.

The Victoria Street frontage has high aesthetic significance and landmark qualities, in particular the 1938 building, the main 1886 building and smaller 1886 building on the southern end. St Vincent's College has aesthetic significance for its setting overlooking Woolloomooloo Bay and Sydney Harbour, the Opera House and the Harbour Bridge. Within the site, the location of the Chapel building and its relationship to the original 1853, 1863 and 1886 College buildings is of aesthetic significance.

CRITERION D

An item has strong or special associations with a particular community or cultural group in NSW (or local area).

St Vincent's' College has strong associations with students and their families, staff and the Sisters of Charity, and with numerous significant events over the years of its operation as a school. St Vincent's college has a strong association with the Sisters of Charity and with the educational philosophy associate with the order, which, contributes to the contemporary esteem held by the college.

CRITERION E

An item has the potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of a local area).

This criterion addresses potential. The contribution of St Vincent's College is well known. It is unlikely that there are potential archaeological contributions due to redevelopment on extant historic structures.

CRITERION F

An item processes uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of a local area).

The remnants of the original 'Tarmons' house incorporated into the 1966 Tarmons building have rarity.

CRITERION G

An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments.

St Vincent's College, its site and fabric and as an institution is important in demonstrating the development of a school founded by the Sisters of Charity that had its origins in 1853 and that has been operating as St Vincent's College since 1882.

4. St Vincent's College historical background

4.1. Historical overview and chronology

St Vincent's College generally

(Historical overview source: *Heritage Assessment St Vincent's College Potts Point* by Tanner and Associates 1999) The Sisters of Charity founded St Vincent's College, Potts Point, in 1858. The College is historically important for its long association with the Potts Point site and with the Sisters of Charity. The College has a number of culturally significant buildings, which include the 1886 Main Building designed by Sheerin & Hennessy, and the 1901 Chapel Building, both good examples of educational and religious institutional architecture in Australia.

St Vincent's College is also associated with the early colonial settlement of Sydney, as the College was originally located in the 1838 house called 'Tarmons' was built by Sir Maurice O'Connell, a Commander of the Military forces of New South Wales. Remnants of 'Tarmons' have been sympathetically placed in the new 1966 'Tarmons' building. Sir Charles Nicholson, former Chancellor and founder of University of the Sydney, has also been associated with 'Tarmons'.

The College has maintained its high educational standard for over one hundred and fifty years. The setting of St Vincent's and the fact that most of the original college buildings survive is evidence of the strong bond the College has with the Potts Point site. The garden setting, its established trees and views to Sydney Harbour are reminiscent of the original 'Tarmons' house garden.



Figure 8

St Vincent's College in 1917 showing the Chapel, Tarmons behind the Himalayan pine tree and the 1886 Victoria Street building on the right (Source: CMP Ruth Daniell 2010).

The Main School Building

The 1886 Main School building has had continuous use associated with the school. The building originally housed two school rooms 60' by 30' on the ground floor either side of the entrance hall. There were porches on each end. The first floor accommodated two dormitories for borders, and four supervisory cells bathrooms lavatories etc. There was a large space reserved for an oratory. On the second floor there were fourteen cells (small rooms) and six rooms for sewing, music and special classes and a dormitory for novices. The rooms are primarily classrooms today. Some of the fabric of the building was compromised by the 1966 works to the building and included removal of the central main stair and the joinery fitout. There is sufficient original and interior fabric to remaining to represent the Victorian character of the interiors.

(Source: CMP Ruth Daniell 2010)

1882	Early land grants - Governors Thomas Brisbane and Ralph Darling made numerous members of the colonial establishment. The grants were mode on the condition that villas of a least 1000 pounds were built upon them within three years. The villas were to face towards Government House. In 1828 John Busby received 8 acres (3.2 ho) at Woolloomooloo Heights in return for a new supply of fresh water for Sydney (the Lachlan Swamps).
1834	Busby by sold the estate to Hamilton Collins Semphill in 1834.
1838	Semphill transferred 5 acres of the western end of the estate to form of a battle axe block, to Sir Maurice O'Connell by way of mortgage for 2,380 pounds.
	Figure 1 . Plan of the Estate of Sir Maurice O' Connell, 1839. Source: Congregational Archives of the Sisters of Charity.
1838	Construction of 'Tarmons'
1841	Planting of a Deodar cedar in front of 'Tarmons' by Lady O'Connell (a differing account it was planted by Sir Charles Nicholson)
1852	Purchase of 'Tarmons' by Sir Charles Nicholson
1856	Nicholson sold his property to the Sisters of Charity for 10 000 pounds with a subsequent gift of 5000 pounds.
1856	Sisters of Charity established a Hospital in 'Tarmons'
1859	Sisters of Charity opened a small primary school.
1862	An inspector's report noted that the school room used for primary and infants children was in part of the building attached to St Vincent's Hospital not used for any other purpose. The building was constructed of stone and measured 30 feet x 16 x 12 feet.
1863	New building added adjoining the primary school attributed to the architect Mortimer Lewis.
1866	An infants school building of two rooms was built of stone and brick on the grounds of Sir Charles Nicholson's Stables. It was 30 feet x 16 x 15 x 12 feet.
1870-71	The Hospital took up premises in Darlinghurst and the Sister's primary and secondary schools were given the name of St Vincent's High School.
1882	The School changed its name to St Vincent's (Ladies) College
1882	Dormitory built over the 1863 Schoolhouse for borders.
1886	The main school building parallel to the Victoria Street frontage designed by Sheerin & Hennessy, in 1885 and was opened in December 1886 at the cost of 13,000 pounds.
1886	Small 'hall building' constructed to the south of the 1886 main school building, which is believed to be designed by Sheerin and Hennessy
1892-3	A small grotto was constructed to our Lady of Lourdes was constructed inspired by the French grotto of the same name in the location of the 1938 building.
1901	Construction of the school chapel. The design of the building was based on a plan by a Dublin architect W.H. Byrne and its details transposed to Gothic details by a Sydney architect Arthur Polin.
1910	'Bethania' on Challis Avenue (Garcia Music School) was constructed and purchased by St Vincent's College.
1911	A Small alteration to the Victoria Street frontage.
c.1920	Small addition to the 1886 Small 'hall building' located to the south of the 1886 main school building.

1931	In July a storm blew over the Himalayan pine in front of Tramons.
1938	Addition of the new college building adjoining to the north of the 1886 building on Victoria Street designed by Clement Glancy Senior, who was an architect who designed a number of institutional buildings for the Catholic Church.
1938	Demolition of a small section of the northern end of main school building (1886) including the end gable and staircase to facilitate the building of the 1938 College building.
1941	Building application for a 'working sacristy' to the Chapel, by architect Clement Glancy Senior.
1950	Additions to dining room for the Sisters of Charity
1951	Building application for lavatory block and roller shutter 500 pounds.
1951	New entrance gates
1951	Erection of additional staff quarters
1951	Additions to staff quarters
1952	Kitchen and staff dining room 6000 pounds, 1000 pounds
1952	Alterations to verandah 600 pounds
1957	Alterations to store(?) to form classrooms 5000 pounds (1 Rockwall Crescent)
1966	Demolition of 'Tarmons', and construction of the new 'Tarmons' building.
1967	Brick extension with stairs and extension on the eastern side 1886 Sheerin & Hennessy main school building.
1972	Construction of a new school building to the north of the 1938 new college building designed by Clement Glancy Junior.
1992	Construction of Aikenhead House as a boarding house, located behind 'Tarmons' and built in 1992, it was designed by Rhett Partridge & Partners.
1998	Refurbishment of 'Bethania' and demolition of the rear wings.
2009	Acquisition by St Vincent's College of No. 2 Rockwall Crescent.
	(Historical chronology 1882 – 2009 source: Heritage Impact Statement St Vincent's College Ruth Daniell 2010)
2010	Preparation of Conservation Management Plan and Heritage Impact Statement for the College site (Ruth Daniell).
2013	Preparation of Heritage Interpretation Strategy for the College site (Rappoport Pty Ltd).
2016	Preparation of report Sandstone Condition Assessment and Remediation Advice for the College site (Heritage 21).
2018	Safety audit and preparation of report Condition Inspection, Conservation Recommendations St Vincent's College (VSA).



Figure 9

Alfred Coffey's painting of the college from the Sydney Domain in 1908. (Vincentia, 1908) (Source: CMP Ruth Daniell 2010).



Figure 10

A postcard photo of the College in 1902, showing the Chapel on the left-hand side, Tarmons and the 1886 College building on Victoria Street and the old sandstone music rooms (Source: CMP Ruth Daniell 2010).

5. Physical analysis

Current condition assessment

Vivian Sioutas of Vivian Sioutas Architecture (VSA) supervised two safety audits to the facades of the Main School Building and the School Hall Building of St Vincent's College in late 2017. These safety audits were undertaken by a multidisciplinary team who inspected the condition of the stone and brick fabric. The inspection was conducted via sissorlift, elevated work platform and from the ground. Present at the inspection Vivian Sioutas, Heritage Architect (VSA), Sumeer Gohil and Hari Gohil, Structural engineers (Shreeji), Mark Spinks and James Gardner, Stonemasons (SHS).

Main School Building and Victoria street wall (information from VSA Inspection Report)

During the stone safety inspection of the Main School Building Victoria street Elevation substantial amounts of stone was removed from the string course and the gable coping stones. The main street Gable no 2 was found to have substantial amounts of loose stone, deteriorated stone elements, missing brickwork and rotting timber.

The perimeter fence located between Main School Building and the School Hall Building has significant structural damage due to tree roots and the finial cross was unsafe and temporarily removed. In addition, brickwork around window reveals was inspected and requires some repairs.

Severe decay of stonework above the main entry door on Victoria street has caused stone to become unsafe around the lettering and in exposed locations. The 'S' of St Vincent's College was temporarily pinned to save the original lettering until conservation works are to commence.

Main School Building Internal Courtyard and School Hall Building (Victoria street Elevation (information from VSA Inspection Report)

A second inspection was undertaken to investigate Main School Building Internal Courtyard from a scissor lift. Gable 6,7 and 8 were inspected.

The internal courtyard of Main School Building was found to be in better condition however the recent glass roof has created some areas of redirected rainfall that is accelerating the rate of deterioration on the stone elements. The introduction of a doorway at Gable 7 has been inserted without detailing the lead weathering above and directing the water runoff away from the building.

The internal string courses were found to be in better condition but some failing stone was removed.

School Hall Building (Victoria street Elevation) were inspected via an Elevated Work Platform which involved Gable 2, Chimney 2 and Chimney 1.

The stone elements of Gable 2 are in good condition and seismic stabilisation has been installed previously that can be seen from the street. Gate 2 has had some substantial stone deterioration and requires replacement and 100% stone repointing.

See photographic documentation of safety audit and fabric condition below. (Condition Assessment and safety Audit VAS January 2018 is attached as appendix A)



Figure 11 (above) Overview of Victoria Street façade of the Main School Building. (Source: Clytemnestra, 6 September 2010 <u>https://commons.wikimedia.org/w/index.php?curid=11397774</u>) Figure 12 (below) The northern elevation of the School Hall. (Source: VSA 01/2018)





Figure 13

Overview of Victoria Street façade of the School Hall Building. (Source: CMP Ruth Daniell 2010).



Figure 14 Evidence of defective stonework to string course (Source: VSA 01/2018)



Figure 16 Chimney cap following safety audit (Source: VSA 01/2018)



Figure 15 Removal of loose stone during safety audit of stone cap (Source: VSA 01/2018)



Figure 17 Removal of loose stone (Source: VSA 01/2018)



Figure 18 Removal of loose apex stone of Gable 2 (Source: VSA 01/2018)



Figure 20 Typical decay to bottom edge of coping (Source: VSA 01/2018)



Figure 22 Failing mould detail and drip (Source: VSA 01/2018)



Figure 19 Cracking of Gable 2 Apex stone (Source: VSA 01/2018)



Figure 21 Removal of loose stone (Source: VSA 01/2018)



Figure 23 Typical loss of string course (Source: VSA 01/2018)



Figure 24 Removal of loose stone (Source: VSA 01/2018)



Figure 25 Removal of loose stone (Source: VSA 01/2018)



Figure 26 Removal of string course (Source: VSA 01/2018)



Figure 28 St Vincent's lettering cracked (Source: VSA 01/2018)

Figure 27 Removal of string course (Source: VSA 01/2018)



Figure 29 Temporary repairs to "S' of St Vincent's on Victoria street Elevation (Source: VSA 01/2018)



Figure 30 Removal of loose stone to Gable 3 Main School Building (Source: VSA 01/2018)





Figure 31 Open joints to Gable 3 (Source: VSA 01/2018)



Figure 32 Decay, staining and deteriorated mould (Source: VSA 01/2018)



Figure 34 *Finial detail* (Source: VSA 01/2018)

Figure 33 cracking to stonework (Source: VSA 01/2018)



Figure 35 *After removal of finial* (Source: VSA 01/2018)



Figure 36 Victoria street elevation gutters filled with leaves (Source: VSA 01/2018)



Figure 37 Rainwater head filled with leaves on Victoria street (Source: VSA 01/2018)

6. Proposal

The Condition Assessment and Safety Audit (VSA) report of January 2018, including drawings A01, A03, A04, A05, A07, A08, A09 provides a detailed proposed scope of restoration works (see appendix A).

A summary of the VSA proposed scope is listed below with VSA scope drawings following.

Drawings AL1 – AL6 (prepared by Milena Crawford of MC Heritage Services) provide the details of the proposed protective lead weathering and are attached as appendix B.

Main School Building	
Building Element	Condition and recommendation
Eaves and soffits	Timber, some decay evident: Allow to repair approximately 10% of soffit boards and prepare & repaint throughout.
External brickwork	Brickwork in good condition:
	Allow for localised repair. Allow to repoint approximately 30% of facades including all window reveals. Some brickwork is missing on Gable 2, allow to replace.
External sandstone finials	Sandstone in good condition: Refix finials and repoint at joints
Sandstone gables	Coping stained and open joints: Repoint and replace stones as identified. Allow to install protective lead weatherings.
Sandstone chimneys	All chimneys require seismic stabilizing: Repoint and stabilise. Allow for a vertical steel tubular member introduced in the flue and the void between the external of the steel tube and the inside of the flue to be filled. Once filled the chimney is restrained from falling over by securing it to the roof and the ceiling diaphragm.
Sandstone string	Poor condition:
courses	Missing drip detail. Repoint and replace or indent as identified in the drawings
East and West walls	These are tall walls and require restraining at the top. The roof truss ends are to be tied to the top of the wall by introducing a member tied to the wall top.
Stormwater Drainage	In good condition:
	Allow to install mesh guard to gutters and rainwater heads.
Gate 1 and 2	walls are bowing and stone has moved from original location: These are vertical cantilevers in their plane and considered unstable during lateral load actions. These are to be reinforced and tied to the lower sections
School Hall Building	
Eaves and soffits	Timber, some decay evident: Allow to repair approximately 10% of soffit boards and prepare & repaint throughout
Stormwater Drainage	In good condition: Allow to install mesh guard to gutters and rainwater heads.
External brickwork	Brickwork in good condition: Allow for localised repair Allow to repoint approximately 30% of facades including all window reveals. Some brickwork is missing on Gable 2, allow to replace.
External sandstone	Sandstone in good condition:

finials	Refix finials and repoint at joints
Sandstone gables	Coping stained and open joints:
	Gable 4 has not been stabilised. Repoint and replace stones as identified on drawings. Allow to install protective lead weatherings. Gable is to be restrained by tying the top edges of the gables to the existing roof framing diaphragm to stop them from falling during seismic action. It will be necessary to create the diaphragm by introducing bracing in the roof plane and the ceiling plane.
Sandstone chimneys	Chimneys 1 and 2 require stabilising:
	Allow for a vertical steel tubular member introduced in the flue and the void between the external of the steel tube and the inside of the flue to be filled. Once filled the chimney is restrained from falling over by securing it to the roof and the ceiling diaphragm.

















6.1. Program of proposed works stage 1 – 5

item	description
STAGE 1	 MARY AIKENHEAD BUILDING- VICTORIA STREET ELEVATION
STAGE 2	 MARY AIKENHEAD BUILDING Gable 4 and 5
STAGE 3	 MARY AIKENHEAD BUILDIN Internal courtyard
STAGE 4	 ST DOMINICS BUILDING Victoria street Elevation GATE 1 Internal Gable 1
STAGE 5	ST DOMINICS BUILDING South and West Elevation

NOTE: Graph to be updated and confirmed by VSA

6.2. Rationale and assessment of heritage impacts

Overall the facades are in sound condition but do require remediation to repair damaged fabric and to restore public safety and to install seismic stabilisation of the chimney elements. The impact to the heritage fabric will be neutral and acceptable when assessed against the continued rate of decay if remediation works are not undertaken.

Sydney	LEP 2012

5.10 Heritage Conservation		
OBJECTIVES	COMMENT:	
1 Objectives of this clause are as follows:		
A) to conserve the environmental heritage of the City of Sydney	As discussed in this heritage impact statement the proposed works conserve the heritage significance of the subject buildings by carrying out sensitive, appropriate conservation works that will ensure the	
B) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,	continued use and safety of the buildings.	
C) to conserve archaeological sites,	N/A	
D) to conserve Aboriginal objects and Aboriginal places of heritage significance.		
2 Requirement for Consent	N/A SEE PLANNING APPROVALS SECTION 3.4	
Development consent is required for any of the following:		
A) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a	N/A	

building, making changes to its detail, fabric, finish or appearance):	
I) a heritage item,	
II) an Aboriginal object,	
III) a building, work, relic or tree within a heritage conservation area,	
B) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,	
C) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,	
D) disturbing or excavating an Aboriginal place of heritage significance,	
E) erecting a building on land:	
I) on which a heritage item is located or that is within a heritage conservation area, or	
 II) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance, 	
F) subdividing land:	
 I) on which a heritage item is located or that is within a heritage conservation area, or II) on which an Aboriginal object is located 	
or that is within an Aboriginal place of heritage significance.	
3 When consent not required	

3 When consent not required		
However, development consent under this clause is not required if:		
A) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development	As discussed in part <u>3.4 Planning Approvals</u> the scope will be reviewed under the new State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation).	
I) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and	The 2017 SEPP provides a planning approval pathway for private schools (registered non- government schools) under the Education Act 1990 (NSW) to carry out the subject proposal without the need to lodge a development application with the local council.	

II) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or	Private schools are prescribed as public authorities for limited purposes including undertaking environmental impact assessments of certain types of works, including the proposed works.	
B) the development is in a cemetery or burial ground and the proposed development:	N/A	
I) is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and		
II) would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or		
D) the development is exempt development		
4 Effect of proposed development on heritage significance		
The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).	This proposal is for sensitive and appropriate conservation works to the façade. The proposed works will protect the heritage significance of the building by physically repairing the damaged facade and allowing continued and ongoing safe use of the buildings into the future.	
5 Heritage assessment		
The consent authority may, before granting consent to any development:	This report satisfies the requirements for a heritage management document.	
A) on land on which a heritage item is located, or		
B) on land that is within a heritage conservation area, or		
C) on land that is within the vicinity of land referred to in paragraph (a) or (b),		
require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.		
6 Heritage conservation management plans		

The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.	N/A	
7) Archaeological sites		
The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the <u>Heritage Act 1977</u> applies):		
 A) notify the Heritage Council of its intention to grant consent, and B) take into consideration any response received from the Heritage Council within 28 days after the notice is sent. 	N/A	
8 Aboriginal places of heritage significance		
The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:		
A) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and	N/A	
B) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.		
9) Demolition of nominated State heritage items		
The consent authority must, before granting consent under this clause for the demolition of a nominated State heritage item:		
A) notify the Heritage Council about the application, and	N/A	
B) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.		
10 Conservation incentives		
The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an		

Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:	
A) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and	N/A
B) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and	
C) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and	
D) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and	
E) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.	

7. Compliance with developed conservation Policies

Ruth Daniell prepared a *Conservation Management Plan (CMP) for St Vincent's College* in 2010. This document has outlined and developed conservation policies, arising out of the assessment of the historic significance of the St Vincent's College and surrounding site.

To retain the heritage significance of the St Vincent's College buildings including the safety surrounding the site and settings the proposed works have been developed in accordance with the aims and intentions of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter).

The proposed works have been assessed against the Conservation Policies described in the CMP for St Vincent's College and are found to have no negative impacts on the heritage significance of the St Vincent's College and the surrounding site (as above in 6.2 Rationale and assessment of heritage significance).

7.1. Compliance with Management Provisions in Listing Sheet

The proposed works are in accordance with the management provisions outlined in the heritage inventory sheet:

The building should be retained and conserved. A Heritage Assessment and Heritage Impact Statement, or a Conservation Management Plan, should be prepared for the building prior to any major works being undertaken. There shall be no vertical additions to the building and no alterations to the façade of the building other than to reinstate original features. The principal room layout and planning configuration as well as significant internal original features including ceilings, cornices, joinery, flooring and fireplaces should be retained and conserved. Any additions and alterations should be confined to the rear in areas of less significance, should not be visibly prominent and shall be in accordance with the relevant planning controls.

The proposal is for much needed conservation works to the facade of the Main School and School Hall buildings. These works will restore both a) the façades to a formerly known glory and most importantly b) public safety by removing the risk of failing masonry.

No work to interiors, no building additions or modifications to existing façade configurations are included in this proposal.

7.2. Comment and assessment against relevant working policies of the Conservation Management Plan (CMP)

Conservation Policy for Buildings of High Significance generally recommended the following:		
The future conservation and development of the place be carried out in accordance with the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter revised 1999)	The proposal complies. All conservation works to the site and buildings are in accordance with the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter)	
 One of the Key Articles (Article 3) of the Charter relevant to the Conservation Policy and Implementation recommendations of this report notes that: (Article 3) 3.1 Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible. 3.2 Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture. 	The proposal complies. The proposed works seek to remediate the remaining fabric and replace that which has deteriorated beyond its practical and functional life. Careful consideration has been given to each work area and fabric type to ensure compatibility with the proposal. The proposed new materials (e.g lead weatherings) will not distort the heritage significance or interpretation of the site.	
St Vincent's College Precinct Conservation Po	licy	
Conservation should protect the fabric identified with high and medium significance on the site and on historic frontage of Victoria Street and Challis Avenue Conservation should on the Victoria Street frontage protect the high aesthetic significance and landmark qualities in particular for the 1938 building, the main 1886 building and smaller 1886 building	The proposal complies. The remediation works will ensure the ongoing safe use of the buildings. The proposed works have been developed in consultation with a team of heritage experts who specialise in the investigation of finishes and materials conservation. The design of the proposal is the most sympathetic, traditional in nature and will have the ability to achieve material longevity with the least physical impact as possible. The proposed remediation works will be carried out by skilled and experienced tradespeople and supervised by a suitably qualified experienced heritage practitioner. Traditional conservation techniques will be utilised to make the building façades water tight and will ensure public safety from loose and failing stone elements and will restore the façade back to a former glory. All reconstruction work is based on original elements that currently exist on the building. The proposed conservation work to the buildings will enhance the heritage significance and streetscape.	
Conservation should protect the high aesthetic significance and landmark qualities of 'Bethania' in Challis Avenue	N/A	
---	--	
Conservation should protect the high aesthetic significance and landmark qualities of the 1901 Chapel		
Conservation should protect the curtilage and grounds of St Vincent's College as a setting for	The proposal complies.	
the culturally significant buildings	There are no proposed changes to the cartilage of the subject site. The proposed works will have no impact on the subject sites curtilage or subdivision.	
1886 Main School Building	·	
Fabric and Setting:		
Generally, work which affects culturally significant building fabric or external	The proposal complies.	
appearance identified as being of high significance should generally be confined to Preservation, Restoration or Reconstruction as	The remediation works will ensure the ongoing safe use of the buildings.	
fabric should also be subject to continuing care and maintenance.	All conservation works to the site and buildings are in accordance with the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter)	
	The proposed works have been developed in consultation with a team of heritage experts who specialise in the investigation of finishes and materials conservation. The design of the proposal is the most sympathetic, traditional in nature and will have the ability to achieve material longevity with the least physical impact as possible.	
	The proposed remediation works will be carried out by skilled and experienced tradespeople and supervised by a suitably qualified experienced heritage practitioner.	
	Traditional conservation techniques will be utilised to make the building façades water tight and will ensure public safety from loose and failing stone elements and will restore the façade back to a former glory. All reconstruction work is based on original elements that currently exist on the building.	
	The proposed conservation work to the buildings will enhance the heritage significance and streetscape.	
Modifications and additions should minimise necessary intrusions into the original fabric and should be carefully designed to retain the strong Victorian architectural character.	N/A	
The removal of the intrusive bulk of fabric and features associated with the 1966 additions, including the stair element and the external		

walkway is advocated for it will allow eastern views and vistas the building to be reinstated, it will allow the visual The spatial organization of the building, original and early fabric should be retained in terms of the principal rooms, corridors and the main spaces.	
Surviving original and early building fabric should generally be retained and conserved.	The proposal complies. The proposed works seek to remediate the damaged and decayed building fabric while protecting the remaining fabric with the least physical impact as possible. The proposal also aims to retard the deterioration of all significant fabric by reinstating the stone weathering elements and the addition of protective lead weatherings where necessary.
Any reuse of internal spaces for contemporary functions shall respect the architectural character of the rooms	N/A
Any items of contemporary fitout should be installed in a manner that they can be removed at a future time with the minimum of remnant damage to early building fabric.	N/A
Ideally the area where the 1960s additions occur should be restored/reconstructed to a design similar to the original as shown in photographic documentation failing this adaptation can occur in the area where significant fabric has been removed.	N/A
1886 Small School Building with Additions	
Components and fabric of the highest significance grading should be <i>preserved</i>	The proposal complies.
 wherever possible with restoration or reconstruction work carried out where and as necessary to maintain and meaningfully reveal significance. In addition, works to areas and fabric in this category may include some adaptation Components and fabric of medium significance grading should also seek wherever able to preserve significant original or early fabric with restoration or possible; 	The remediation works will ensure the ongoing safe use of the buildings. All conservation works to the site and buildings are in accordance with the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) The proposed works have been developed in consultation with a team of heritage experts who specialise in the investigation of finishes and materials conservation. The design of the proposal is the most sympathetic, traditional in nature and will have the ability to achieve material longevity with the least physical impact as possible.

	The proposed remediation works will be carried out by skilled and experienced tradespeople and supervised by a suitably qualified experienced heritage practitioner. Traditional conservation techniques will be utilised to make the building façades water tight and will ensure public safety from loose and failing stone elements and will restore the façade back to a former glory. All reconstruction work is based on original elements that currently exist on the building. The proposed conservation work to the buildings will enhance the heritage significance and streetscape.
Components and fabric of low significance grading may be retained if useful or expedient but acceptable options also include adaptation or modification including Components and fabric of low significance grading may be retained if useful or expedient but acceptable options also include adaptation or modification including removal in whole or in part with recording recommended prior to removal.	N/A

8. Conclusion and Recommendations

The proposal is for façade remediation works to the Main School Building and School Hall of St Vincent's College, Potts Point, NSW.

These works are urgently required to restore architectural detailing such as drip moulds that assist to shed water from the façade and meet a back-log of façade maintenance issues. The proposed works will ensure the rate of decay of the significant heritage fabric of the buildings is greatly reduced. Most importantly the proposed works will reduce the public safety risk of failing masonry in the future.

There will be no negative impacts upon the significant Victoria Street streetscape or the Heritage items in the vicinity of the College.

The proposed remediation works are supported in heritage terms by compliance with the aims and intentions of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter), the aims and intentions of the *Conservation Policies for St Vincent's College (Ruth Daniell 2010)* and in accordance with the State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation).

There will be no negative impacts upon the Main School Building and the School Hall. The remediation works will enhance the significance and protect the fabric for the future.

The proposed remediation works are worthy of support.

9. Appendix A

Condition Inspection and Safety Audit, Conservation Recommendations, St Vincent's College – Vivian Sioutas Architects. Report No. 00117 24/01/2018

CONDITION INSPECTION AND SAFETY AUDIT

CONSERVATION RECOMMENDATIONS

St. Vincents College

Potts Point

January 2018 | Report No. VSA 00117

DRAFT 24/01/2018



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CONDITION INSPECTION AND SAFETY AUDIT

CONSERVATION RECOMMENDATIONS St Vincents College Potts Point

Vivian Sioutas

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ISSUE/	AUTHOR	REVIEWED		APPROVED FOR ISSUE		
REVISION		Name	Signed	Name	DATE	
First Draft	V.Sioutas	V.Sioutas	APPROVED	V.Sioutas	24/01/2018	
Final Draft	V.Sioutas					



St Vincents College Potts Point, Aerial Location Plan

Executive Summary

St Vincents College was founded by the Sisters of Charity and has operated as St. Vincents College since 1882. The St Vincents College Board have engaged Vivian Sioutas Architecture to develop a program of works to address substantial back-log of external Stone maintenance issues. This External Maintenance Strategy provides a tactical approach by prioritising works where there is a safety risk and proposes repairs that will significantly slow down the rate of deterioration to prevent further short-term safety risks.

The initial site investigations were undertaken late in 2017 which included two stone Safety Audits of the external brick and stone facades of Mary Aikenhead Building and St. Dominics Building. Approximately 65kg of loose and potentially dangerous stone was removed. The removal of this loose stone has left a building that is disfigured and missing mould details, drip details and open joints. The current rate of deterioration will increase by a minimum of 33% due to the stone elements no longer shedding water effectively and current open stone joints that will increase the ingress of water.

The proposed 2017-20 program includes repairs to stonework, roof plumbing ,brickwork ,timber windows , seismic and structural strengthening and installation of lead weatherings. Scope of works and timelines have been developed in consultation with the St. Vincents College to ensure minimal disruption to the day to day operation of the school activities.

The stone nominated is Sydney Yellowblock which is readily available due to a recent extraction endorsed by NSW State Government, Ministers Stone program.

The site was assessed by a multidisciplinary team and inspections were undertaken from the ground, an Elevated Work Platform and a scissor lift. Some limitations of access may create the potential of an increased scope, hence a 20% contingency has been added to the budgets to allow for scope increase from the scaffold.

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- Architectural Drawings

1.1 Background

St. Vincents College occupies the historic School Site site with structures dating from the 1858.

St. Vincents College Stone Facade Maintenance Strategy has been requested by St Vincents College board to address WHS risks and the significant back-log maintenance requirements of the St Vincents College site. This document has been prepared by Vivian Sioutas Senior heritage architect of VSA, Hari and Sumeer Gohil of Shreeji Consultants, Mark Spinx of Sydney Heritage Stonemasons, Penny Goldin Goldoin assoc and Katie Hicks of Craftetech.The strategy has been developed with reference to the following documents:

- Heritage 21, Job no 2511 sandstone condition assessment and remediation advice – St Vincent's College.
- http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails. aspx?ID=2421381

1.2 The Brief

The objective of the Inspection and audit was to review the condition of the external building fabric and develop a program of works that addresses the risk of unstable facade elements such as windows and stonework. In addition to risk minimisation works, the aim is to identify works that provide protection to the existing fabric and that will bring the buildings to a reasonable condition. The repair recommendations have been prioritised and a forward plan captures essential works that support the objectives that may be programmed for beyond 2017/18.

1.3 Methodology

The 2 buildings Mary Aikekhead and St Dominincs building and the boundary wall on Victoria street were inspected by a multidisciplinary team that consisted of a heritage architect, heritage structural engineer and stonemasons. The buildings were assessed from the ground elevated work platform and scissor lift as well as inspection inside the roof spaces.Repair recommendations have been prioritised based on public safety, structural stability and condition. The methodology employed in the assessment process is in accordance with the Australian ICOMOS Burra Charter for Places of Cultural Significance, 1999.

1.4 Limitations of Scope and Estimates

Some components of the inspections were limited from ground level as machine access was not accesible and additional scope (and therefore cost) may be identified on closer inspection from scaffold. Due to identified risks, works on Mary Aikenhead Building, Victoria street Elevation are seen as the first priority. The budget estimates in this strategy can be used for tender purposes. However a technical specification and tender documents are required for tender. A 20% contingency has been added to the cost estimates to allow for possible increases in scope as a result of closer inspection during the documentation/construction phase phase.

1.5 Summary

Date Makesafe Undertaken	28 October,2017 & 9 Decemer, 2017
Recording By	Vivian Sioutas , Heritage Architect (VSA)
	Sumeer and Hari Gohil, Structural engineers (Shreeji)
	Mark Spinks and James Gardner, Stonemasons(SHS) Approx.
Weight of Stone Removed	65kg + 100kg cross finial temporarily removed

ITEM	DESCRIPTION	CARRIED OUT BY	PROGRAM
Measured Drawings	Preparation of measured drawings identifying stone units	Milena Crawford	October 2017
Safety Audits Stage 1	 Inspect Mary Aikenhead Building (Victoria st elevation) Inspect St Dominics Building(Victoria st elevation) Inspect Internal roof space of both buildings 	VSA Shreeji SHS	November 2017
Safety Audits Stage 2	 Inspect Mary Aikenhead Building West and South Elevation Inspect St Dominics Building Victoria st elevation (south- ern end) 	VSA Shreeji SHS	December 2017
Documentation	 Prepare documentation and recording of Mary Aikenhead Building and St Dominics Building documented boundary wall to Victoria st elevation documented Internal roof / gables/chimneys of both buildings 	VSA PG KH	December-January
Cost Estimates & Project Planning	Preparation of cost estimates	VSA SHS	January 2018

2.1 Statement of Significance

St Vincent's College is of historic significance for its long association with the historical development of Potts Point and with the Sisters of Charity, the founding order of the school.

The College is roughly located on the site of Tarmons (built in 1838 for the NSW Commander of the military forces, Sir Maurice O'Connell), one of the earliest and most significant residences in the area. Tarmons was in the possession of The Sisters of Charity by 1856 and St Vincent's Hospital and school were established by 1858.

By 1870 the St Vincent's Hospital had been relocated to Darlinghurst and in 1882 St Vincent's Ladies College (an amalgamation of St Vincent's Primary School and High School) was opened. The College is the oldest registered girls school in the Commonwealth.

Architects Sheering and Hennessey designed the 1886 Victoria Street building. A prominent 3 storey Victorian Gothic style building with high aesthetic significance and landmark qualities. Approximately 10 meters to the south of the main building, the small two-storey school hall also in the Victorian Gothic style was built (design was also likely by Sheering and Hennessey) in 1886.

The Victoria Street facades have undergone various modifications overtime. Including the demolition of the northern end gable and staircase – what would now be considered highly significant fabric, to accommodate the construction of a new College building in 1938. In 1950 a two storey addition was constructed to the School Hall, while the design attempted to replicate the original style of the 1886 building, unsympathetic materials were employed (eg concrete elements instead of sandstone elements).

The St Vincent's site and fabric are of high architectural (and heritage) significance to the development of the Potts Point area. St Vincent's College as an institution is important in demonstrating the development of the school founded by the Sisters of Charity that has been operating as St Vincent's College since 1882.

References:

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails. aspx?ID=2421381

Heritage 21, Job no 2511 – sandstone condition assessment and remediation advice – St Vincent's College.

2.2 Heritage Approvals:

The College property includes two items of environmental heritage (11121 and 11122) as listed by the City of Sydney under Schedule 5 of the Sydney Local Environmental Plan 2012 (SLEP 2012). The school is located within the Potts Point Heritage

Conservation Area (C51) as stated under Schedule 5 of the Sydney Local Environmental Plan 2012 (SLEP 2012).

Sydney LEP 2012, Schedule 5 Environmental Heritage – ITEM INFORMATION

Item I1121 St Vincent's Convent group including buildings and their interiors and grounds 1 Challis Avenue Lots 11–17, DP 2436; Lot 1, DP 135902; Lot 19, DP 975168; Lot X, DP 415506

Local Item I1122Former convent "Bethania" and "Carmelita"

(formerly 15–19 Challis Avenue) including interiors1 Challis Avenue Lot 1, DP 935719; Lot 10, DP 912103 Local

The two subject buildings (c.1886) are located within Local Heritage Item 1121, and are located along Victoria street. The works will include stone replacement and possible structural strengthening in the roof space of gables. St Vincent's Convent group including Buildings and their interiors and Grounds.

The scope of conservation works as identified above are generally considered to be repair or maintenance, and are exempt from approval (without notification) under Section 57(2) of the NSW Heritage Act.

The seismic works however, involve structural works and the insertion of new fabric and would require notification to the NSW Heritage Council, the submission of detailed drawings, an exemption form and a Heritage Impact Statement.

2.3 Planning Approvals

1. The school relates to New SEPP (Education and Child Care) 2017

The scope will be reviewed under the new State Environmental Planning Policy (Education and Child Care) 2017 (SEPP) and the amendment to the Environmental Planning and Assessment Regulation 2000 (Regulation), both of which commenced on 1 September 2017.

This new SEPP provides a new planning approval pathway for private schools. Existing private schools that are registered non government schools under the Education Act 1990 (NSW) can now carry out the subject proposal without the need to lodge a development application with the local council.

Private schools are now prescribed as public authorities for limited purposes including undertaking environmental impact assessments of certain types of works, including the proposed works. An existing private school is a determining authority for the purposes of undertaking an environmental impact assessment under Part 5 of the Environmental Planning and Assessment Act 1979 for development (defined as an "activity" under Part 5) that may be carried out without consent on land within the boundaries of the existing school, pursuant to clause 36 of the new SEPP.

Clause 36 states:

- 36 Schools -development permitted without consent (note that the term "without consent" means without the consent of council, however consent is still required
 - from the determining authority (the school) of the environmental impact assessment and if any other approvals are required such as under the Heritage Act)

36(1) Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school:

(b) minor alterations or additions, such as:

- (i) internal fitouts, or
- alterations or additions to address work health and safety requirements or to provide access for people with a disability, or
- (iii) alterations or additions to the external façade of a building that do not increase the building envelope (for example, porticos, balcony enclosure or covered walkways),

(c) restoration, replacement or repair of damaged buildings or structures,

All environmental assessments related to clause 36 of the SEPP must comply with the NSW Code of Practice for Part 5 Activities for Registered Non-Government Schools made by the Minister for Planning under the Regulation, and published in the New South Wales Government Gazette on 1 September 2017.

In relation to the proposal, the Code provides that various matters must be included in the environmental impact assessment (in the form of a Review of Environmental Factors (REF), before the determining authority (the school) approves the proposal and signs off the environmental impact assessment.

The Code, for instance, provides that the REF is to be placed on the school's web site after approval. Various other matters are included in the Code, such as that the works need to comply with the BCA (now the National Construction Code) and a suit – ably qualified person needs to state that the works comply.

The Code includes other requirements, and these will be provided by the planner in a timely manner so that the school may comply. Note that an audit may be undertaken by the Government of any Part 5 assessments prepared by private schools.

During the preparation of the draft REF, the Department of Planning and Environment will be contacted to ensure that the REF is being prepared in accordance with the Code – as this REF will be one of the first prepared in NSW since the commencement of the new SEPP.

There are also design principles that proposed developments need to consider – however in relation to the proposal – these are not highly relevant.

2. Heritage Impact Statement

A Heritage Impact Statement will be required to accompany the REF.2.3

3.0 Inspection Summary

3.1 First Inspection 28 OCTOBER , 2017

Mary Aikenhead Building and Victoria street wall

During the stone safety inspection of Mary Aikenhead Building Victoria street Elevation had substantial amounts of stone removed from the string course and of the gable coping stones. The main street Gable no 2 was found to have substantial amounts of loose stone, deteriorated stone elements, missing brickwork and timber rotting.

The perimeter fence located between Mary Aikenhead Building and St. Dominics Building has significant structural damage due to tree roots and the finial cross was unsafe and temporarily removed. In addition, brickwork around window reveals was inspected and requires some repairs.

Severe decay of stonework above the main entry door on Victoria street has caused stone to become unsafe around the lettering and in exposed locations. The 'S' of St Vincents College was temporarily pinned to save the original lettering until conservation works are to commence.

3.2 Second Inspection 9 DECEMBER 2017

Mary Aikenhead Building Internal Courtyard and St Domincs Building (Victoria street Elevation)

A second inspection was undertaken to investigate Mary Aikenhead Building Internal Courtyard from a scissor lift. Gable 6,7 and 8 were inspected.

The internal courtyard of Mary Aikenhead Building was found to be in better condition however the recent glass roof has created some areas of redirected rainfall that is accelerating the rate of deterioration on the stone elements. The introduction of a doorway at Gable 7 has been inserted without detailing the lead weathering above and directing the water runoff away from the building.

The internal string courses were found to be in better condition but some stone was removed that was failing .

St Dominics Building (Victoria street Elevation) were inspected via an Elevated Work Platform which involved Gable 2 , Chimney 2 and Chimney 1.

The stone elements of Gable 2 are in good condition and seismic stabilisation has been installed previously that can be seen from the street. Gate 2 has had some substantial stone deterioration and requires replacement and 100% stone repointing.

3.3 Photographic recording MARY AIKENHEAD BUILDING



Figure 1 Victoria street elevation gutters filled with leaves



Figure 2 Finial detail



Figure 3

Example of crude elastomeric repointing to gable coping



Figure 5 Typical decay to bottom edge of coping





Example of crude elastomeric repointing to gable coping



Figure 6 Decay and staining at gable coping

MARY AIKENHEAD BUILDING



Figure 7 Rainwater head filled with leaves on Victoria street



Figure 8 Evidence of defective stonework to string course





Loose previous synthetic repairs



Figure 10 Previous synthetic repairs failing



Figure 11 Biological growth and evidence of cracking to top face



Figure 12 Decay, staining and substantial cracks





Figure 14 Eremoval of loose stone during safety aidit of stone cap



Figure 15 Fretting to underside of stone cap

cracked chimney cap



Figure 16 Chimney cap following safety audit



Figure 17 Typical decay to bottom edge of sill

Figure 18 Brickwork fretting

Mary Aikenhead Building Gable 3 and Gate 1



Figure 19 Removal of deacayed stonework from window sill





Figure 20 Removal of loose stone



Figure 21 removal of finial above Gate 1





Figure 23 Cracking of Gable 2 Apex stone



Figure 24 Removal of loose apex stone of Gable 2



Figure 25 Removal of loose apex stone of Gable 2



Figure 26 Removal of loose apex stone of Gable 2



Figure 27 Removal of loose apex stone of Gable 2



Figure 29 Typical decay to bottom edge of coping

Figure 28 Removal of loose apex stone of Gable 2



Figure 30 removal of loose stone



Figure 31 Evidence of defective brickwork to window reveallevel



Figure 33 evidence of biological growth



Figure 32

Evidence of missing brickwork to window reveal and missing stone window reveal



Figure 34 Previous loss to underside of string course



Figure 35 Typical loss of string course



Figure 36 Failing mould detail and drip



Figure 37 Removal of loose stone



Figure 38 Removal of loose stone



Figure 39



Figure 40 Removal of loose stonel



Figure 41 Removal of loose stone

LRemoval of loose stone



Figure 42 Removal of loose stone



Figure 43 Removal of section of deteriorated stone



Figure 44 removal of loose stone



Figure 46 Cracking to base of window mullion



Figure 47 Removal of loose stone above doorway

Removal of loose stone



Figure 48 Removal of string course



Figure 49 Removal of string course



Figure 50 St Vincents lettering cracked



Figure 51 Removalof loose moulding



Figure 52 Removalof loose moulding



Figure 53 Temporary repairs to "S' of St Vincents on Victoria street Elevation



Figure 54 Temporary repairs to "S'



Figure 55 Photographic recording of chimneys



Figure 56 Wind erosion to stone springer



Figure 57

removal of loose stone to Gable 3 Mary Aikenhead Building



Figure 58 Open joints to Gable 3



Figure 59 Typical decay to bottom edge of timber sill of Gable 3



Figure 60 Condition of finial on Gable 3

St Dominics Building



Figure 61 Finial Detail St Dominics Building



Figure 62 Loose stone removed



Figure 63 Loose stonework





Figure 65 Typical decay to bottom edge of moulding



Figure 66 Decay, staining and deteriorated mould

Mary Aikenhead Building Gable 4



Figure 67 Gable 4 delaminating stone



Figure 68 Crack at finial



Figure 69 Final detail





Figure 71 Remoaval of stone moulding



Figure 72 missing mould detail

St Vincents College Potts Point Stone Maintenance Strategy 2017-2018 :

Mary Aikenhead Building Gable 4 and Gable 7



Figure 73 Gable 4 detail



Figure 75 Inappropiate water runoff detail



Figure 77 leadlight glass missing



Figure 74 cracking of stone Y23 and Y24 of Gable 4





Figure 78 Detail of lead weathering

Figure 76



Figure 79

Gable 4 inspection as close as possible from machine access



Figure 80 Drummy stone removed



Figure 81 Drummy stone removed



Figure 82 Not effective water shedding detail



Figure 83 Typical wind erosion to springer stones



Figure 84 Inappropriate lead weathering detail



Figure 85

Lead weathering detail to be rbought up to standard and appropriately shed water from stone



Figure 87 condition of springer



Figure 86

Lead weathering detail to be rbought up to standard and appropriately shed water from stone



Figure 88 Open stone joints, biological growth



Figure 89 Open stone joints



Figure 90 Carcking to back of gable and open joints

Mary Aikenhead Building Gable 7 and Gable 6



Figure 91

Removal of section of rusted stack pipe at first floor level



Figure 92 Evidence of water run off staining stone gables





Figure 93 Previous stone repairs

Figure 94 cracking to stonework



Figure 95 Typical wind erosion to springer stones



Figure 96 Chimney 3 detail



Figure 97 Loose stone removed from coping



Figure 98 Evidence of cracking stonework



Figure 99 biological growth

Figure 100 Removal of loose stone - coping unable to shed water



Figure 101 Typical cracking of moulding



Figure 102 Decay, staining and stonework cracks
3.4 Condition and Recommendations

building element	condition	recommendation
MARY AIKENHEAD BUILD	ING	
Roof/Eaves	- Slate tile roof	 Roofing is not in need of work at this time.
Eaves and soffits	Timber, some decay evident	 Allow to repair approx 10% of soffit boards and prep & repaint throughout
External brickwork	- Brickwork in good condition	 Allow for localised repair al- low to repoint approx 30% of facades including all window reveals
		 some brickwork is missing on Gable 2
External sandstone finials	 Sandstone in good condition however fixxing needs to be reviewed 	 Refix finials and repoint at joints
Sandstone gables	Copping stained and open joints	 repoint and replace stones as identified
		 allow to cover with lead weatherings
Sandstone chimneys	All chimneys require stabilising	 repoint and stabilise
	from collapsing during seismic actions	Allow for a vertical steel tubular member is introduced in the flue and the void between the external of the steel tube and the inside of the flue is filled. Once filled the chimney is restrained from falling over by securing it to the roof and the ceiling diaphragm.
Sandstone string courses	 poor condition missing drip detail 	 repoint and replace or indent as identified in the drawings
East and West walls	these are tall walls and require restraining at the top	The roof truss ends are to be tied to the top of the wall by introduc- ing a member tied to the wall top.
Stormwater Drainage	 In good condition besides leaves on Victoria street elevation 	 Allow to install nesh guard to gutters and rainwater heads
Gate 1 and 2	walls are bowing and stone has moved from original location	These are vertical cantilevers in their plane and considered un- stable during lateral load actions. These are to be reinforced and tied to the lower sections

building element	condition	recommendation
ST DOMINICS BUILDING		
Roof	- Slate tile roof	 Roofing is not in need of work at this time.
Eaves and soffits	- Timber, some decay evident	 Allow to repair approx 10% of soffit boards and prep & repaint throughout
Stormwater Drainage	 In good condition besides leaves on Victoria street elevation 	 Allow to install nesh guard to gutters and rainwater heads
External brickwork	- Brickwork in good condition	 Allow for localised repair Al- low to repoint approx 30% of facades including all window reveals
		 some brickwork is missing on Gable 2
External sandstone finials	 Sandstone in good condition however fixing needs to be 	 Refix finials and repoint at joints
Sandstone gables	 Copping stained and open joints Gable 4 has not be stabilised 	 repoint and replace stones as identified
		 allow to cover with lead weatherings
		Gable is to be restrained by tying the top edges of the gables to the existing roof framing diaphragm to stop them from falling during seismic action. It will be neces- sary to create the diaphragm by introducing bracing in the roof plane and the ceiling plane.
Sandstone chimneys	 Chimneys 1 and 2 require stabilising 	A vertical steel tubular member is introduced in the flue and the void between the external of the steel tube and the inside of the flue is filled. Once filled the chimney is restrained from falling over by securing it to the roof and the ceiling diaphragm. If the structure to create the diaphragm are not present, then option of restraining by an exter- nal members is considered.

3.5 Budget and Program

item	description	program of works	on site program 2017-20 dependent on date of funding approval
STAGE 1	 MARY AIKENHEAD BUILDING- VICTORIA STREET ELEVATION 	26	2018-2019
STAGE 2	MARY AIKENHEAD BUILDINGGable 4 and 5	18	2018 -2019
STAGE 3	MARY AIKENHEAD BUILDINInternal courtyard	18	2019-2020
STAGE 4	 ST DOMINICS BUILDING Victoria street Elevation GATE 1 Internal Gable 1 	22	2018-2019
STAGE 5	ST DOMINICS BUILDINGSouth and West Elevation	18	2019-2020
		- 102weeks	

4.0 Associated Documentation





St Vincents College Potts Point Stone Maintenance Strategy 2017-2018

















RESIDENTIAL HERITAGE & PUBLIC BUILDINGS

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10. Appendix B

Drawings AL1 – AL6 (prepared by Milena Crawford of MC Heritage Services) provide the details of the proposed protective lead weathering













SANDSTONE CONDITION ASSESSMENT AND REMEDIATION ADVICE ST VINCENTS COLLEGE, POTTS POINT NSW



 $\begin{array}{c} \textbf{HERITAGE21}\\ \textbf{CULTURAL BUILT HERITAGE IN THE 21}^{\text{ST}} \textbf{ CENTURY} \end{array}$

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> Job No. 2511 April 2016

Heritage Impact Statements Photographic Archival Recordings Fabric Analyses Conservation Management Plans Interpretation Strategies Heritage Approvals & Reports On-site Conservation Architects Expert Heritage Advice Schedules of Conservation Work

Heritage21

Cultural Built Heritage in the 21st Century

Rappoport Pty Ltd ABN 76 064 687 592

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The following table forms part of the quality management control undertaken by Rappoport Pty Ltd regarding the monitoring of its intellectual property as issued.

Issue	Notes / Description	Date	Initials
1	Draft report (D1) issued for comment.	01.02.16	VN
2	Report Issued (RI).	26.04.16	VN

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Job No. 2511

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1.0 INTRODUCTION

1.1 Authors

This Sandstone Condition Assessment and Remediation Advice has been prepared by Paul Rappoport and Veerle Norbury of Heritage 21.

1.2 Purpose

This Sandstone Condition Assessment and Remediation Advice has been requested by St Vincent's College. Our task has been to inspect the sandstone elements on the heritage façades of the subject buildings and to recommend solutions for the repair and conservation of these elements.

A concern regarding public liability has arisen due to falling of sandstone fragments of the Victoria Street façade especially since last winter (Figure 1).



Figure 1. Sandstone fragments found fallen from the Victoria Street façade.

1.3 The site

St Vincent's College is located in Potts Point and is within the boundaries of the City of Sydney Council.

The College property includes two items of environmental heritage (I1121 and I1122) as listed by the City of Sydney Council under Schedule 5 of the *Sydney Local Environmental Plan 2012* (SLEP 2012). It

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is also located within the Potts Point Heritage Conservation Area (C51) as stated under Schedule 5 of the *Sydney Local Environmental Plan 2012* (SLEP 2012).

The two 1886 buildings which are the subject of this report are located within Local Heritage Item I1121¹, and are located along Victoria Street (Figure 2).



Figure 2. Aerial view of St Vincent's College, with the red arrows indicating the two 1886 buildings on Victoria Street subject to this report. (Source: *Six Maps*, accessed January 2016)

¹ St Vincent's Convent Group Including Buildings and their Interiors and Grounds, in: NSW Office of Environment and Heritage. Accessed January 2016. http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2421381

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2.0 HISTORICAL CONTEXT

In 1856, the Sisters of Charity purchased the property 'Tarmons' from Sir Charles Nicholson, one of the founders of the University of Sydney and a Member of the Legislative Council, at a cost of £10.000, of which £1000 was donated by Nicholson himself. The Sisters of Charity renamed the property 'St Vincent's' after the 17th Century French priest and charity worker St Vincent de Paul who founded the French Sisters of Charity in 1660.²

Initially the property was used as a hospital with men's and women's wards. In 1858, St Vincent's Primary School opened, which at first was a private primary school, however from 1861 State approval for the school was granted. In 1870, St Vincent's Hospital moved to Darlinghurst, and in 1871, the Sisters of Charity opened St Vincent's High School. In 1882, St Vincent's Ladies' College, an amalgamation of St Vincent's Primary School and St Vincent's High School, was opened. The following decades were marked by several stages of development in the College. ³

In 1885, the foundation stone of the main school building on Victoria Street –designed by Sheerin and Hennessy- was laid, and in 1886 the three-storey building was completed and opened. The small two-storey school hall –probably also designed by Sheerin and Hennessy- was built approximately ten meters to the south of the main school building in 1886.



Figure 3. Undated postcard of St Vincent's Convent, showing the main school building from Victoria Street (Source: *St Vincent's Convent, Potts Point,* 1986.D117.0286, in: *National Museum of Australia*).



Figure 4. Undated (probably late 19th Century) woodcut of the north-eastern part of the main school building, of which the staircase with the crenulated parapet was demolished in 1938, when the adjoining building was constructed (Source: Frappell, S, *St Vincent's College*, p19).

² Whitaker, A-M, St Vincent's Hospital 1857 - 2007 150 years of charity, care & compassion, 2007, p3.

³ Heritage 21, Statement of Heritage Impact: Proposed Development at St Vincent's College, May 2013.

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Figure 5. 1902 postcard of St Vincent's Ladies College, with the main school building on the right (with its northern façade and part of its eastern façade showing). (Source: Frappell, S, *St Vincent's College*, p59).



Figure 6. 1908 painting of St Vincent's College by Alfred Coffey, with the main school building prominently depicted (Source: Frappell, S, *St Vincent's College*, p40).



Figure 7. 1910 photograph of the main school building (with its western façade and part of its northern façade showing) (Source: Frappell, S, *St Vincent's College*, p38).



Figure 8. 1917 photograph of St Vincent's College, with the main school building on the right (with its eastern façade showing) (Source: Frappell, S, *St Vincent's College*, p70).

In 1938, a new College building (Figure 9) was constructed on Victoria Street, immediately to the north of the main school building. For this purpose, a section of the main building –including the end gable and staircase- were demolished. 4

⁴ St Vincent's Convent Group, in: NSW Office of Environment and Heritage. Daniell, R, Conservation Management Plan: St Vincent's College, Victoria Street, Potts Point, December 2010, 15.

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Figure 9. 1939 photograph of the 1938 building built immediately to the north of the main school building on Victoria Street (Source: Frappell, S, *St Vincent's College*, p94).

In 1950 a two-storey addition was attached to the school hall. This addition has been described in other publications as to have taken place in the 1920s⁵; however, the Approval Document from the Sydney Council in 1950 (Figure 12) proves this to be the correct date for this addition. ⁶ For the purposes of this report, it is important to note that -even though the 1950 addition aimed at copying the 1886 building- concrete elements were used in this addition instead of sandstone (Figure 13).



Figure 10. 1943 aerial with the originally L-shaped school hall circled in red; the addition to the eastern part of the building has not taken place yet (Source: *Six Maps*).



Figure 11. 1949 aerial with the originally L-shaped school hall circled in red; the addition to the eastern part of the building has not taken place yet (Source: *City of Sydney Historical Atlas*).

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⁵ Frappell, S, *St Vincent's College Potts Point 1858-2008*, Kingsclear Books, Alexandria, 2008, p123-139. *St Vincent's Convent Group*, in: NSW Office of Environment and Heritage.

⁶ St. Vincent's Convent & College - development application [plans attached], 14 June 1950 – 12 July 1950 (3471/50), in: City of Sydney Archives.



Figure 12. 1950 locality plan for the addition to the school hall with the School Hall building circled in red (Source: *St. Vincent's Convent & College - development application [plans attached]*, 14 June 1950 – 12 July 1950 (3471/50), in: *City of Sydney Archives*)



Figure 13. School Hall building, showing the 1950 addition to the left, and the original 1886 building to the right.

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In 1967, a new brick extension including stairs was added to the eastern façade of the main school building (Figure 14).⁷



Figure 14. 1991 photograph of St Vincent's, the red arrows indicating the location of the main school building (showing its eastern façade, including the 1967 extension) and the small school hall (only the roof visible) (Source: Frappell, S, St Vincent's College, p156).

⁷ Daniell, R, *Conservation Management Plan: St Vincent's College, Victoria Street, Potts Point*, December 2010, 16.

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3.0 FABRIC OVERVIEW

<u>General</u>

The client has indicated that an inspection of the heritage façades is needed for the two 1886 buildings on Victoria Street, specifically for the sandstone elements of the building. Problems relating to the sandstone elements will be listed and solutions to these problems will be recommended.

Elements

Cruciform finials (roofs & boundary walls) Chimneys (roofs) Gable barge (roofs) Tympanum (gable face) Capping (boundary wall) Label moulds (windows) Lintels (windows & doors) Sills (windows) Columns between central windows String courses Label moulds (doors) Voussoirs/arch and fielded panels (doors) Jambs (doors) Heraldry (sign) Saddle stones and capping (buttresses) Niches and 'gablets' Quoins (gables) Plinth **Bricks**



Figure 15. Main Building on Victoria Street (western façade)



Figure 16. School Hall on Victoria Street (western façade)

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<u>Terminology</u>

Carbonaceous inclusion: carbon-based elements present in the sandstone, originating during the formation of the stone.

Case hardening: the phenomenon of the upper crust of a stone delaminating from the rest of the stone as a result of a concentration of iron-oxide in the upper (outer) levels of the stone which causes a differential in density that ultimately leads to hairline cracking and then delamination (usually in the upper/ outer 15- 25 mm section of the stone).

Delamination: Detachment process affecting laminated stones. It corresponds to a physical separation into one or several layers following the stone laminae. The thickness and the shape of the layers are variable. The layers may be oriented in any direction with regards to the stone surface.

Efflorescence/salt crystallisation/salt attack: the visible deposition of salts on the surface of stone. This occurs when soluble salts in solution make their way to the surface of the stone where they crystallise on evaporation, usually resulting in a pale or white coloured staining. Efflorescence is usually related to water entry, such as from leaking roofs, gutters or downpipes. Efflorescence actually frets the surface of the stone and sets up a continual process of crystallisation – commonly affecting the entire fabric of the stone if not halted through repointing and indenting repairs.

Exfoliation (Subtype of delamination): detachment of multiple thin stone layers that are sub-parallel to the stone surface. The layers may bend, twist in a similar way as book pages.

Hairline crack: minor crack with width dimension less than 0.1mm.

Indenting: the process of removal from the building of affected stones (cracks, delamination, salt crystallisation, structural defects) with the use of pneumatic masonry tools and preparation of the parent stone to receive a matching profiled indent of the original secured to the parent stone by means of marine grade 316 stainless steel cramps across a cavity sweetened into the original joint lines of the affected stone.

Current masonry practices insist that when a stone gets indented, the original joints are obeyed.

Pointing: Filling in and closing off of an open joint with appropriate specific mortar. In current heritage remedial repointing practice, a mixture of 1 part cement, 2 parts lime and 9 parts sand is used (1:2:9) as the preferred pointing mixture. In a situation where non-appropriate mortars are used, localized fretting of the sandstone is the result.

Main building: refers to the 1886 Main School Building on Victoria Street.

School hall: refers to the 1886 Small School Hall Building on Victoria Street.

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3.1 ROOFS AND BOUNDARY WALL: CRUCIFORM FINIALS



Figure 17. Cruciform finials on the main building southern gables.



Figure 19. Cruciform finial on the main building southern gable, showing a crack along the sandstone base of the finial.



Figure 21. Cruciform finial on the boundary fence between the main school building and the school hall building.



Figure 18. Cruciform finial on the school hall building roof (Early signs of failing at the base of the finial).



Figure 20. Cruciform finial on the main building southern gable, with delamination of the sandstone base of the finial.



Figure 22. Cruciform finial on the boundary fence to the south of the school hall building.

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Element	Cruciform finials	
Location	Roof (gables) of main building and school hallBoundary wall	
Condition	Fair (staining) to very poor (Figure 19)	
Cause	 Staining due to rainwater with pollutants over time Early signs of failing (Figure 18) Crack on base of finial (Figure 19) 	
Heritage significance	High	
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Replace finial base (Figure 19) with new stone to match original profile. Preventative action: seismically brace the finials (bracing rod inserted from above through the finial anchoring it into the underlying stonework in accordance with structural engineer's detail). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold. 	

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3.2 ROOFS: CHIMNEYS





Figure 23. Location of chimneys on the main building roof. (*Google Maps,* annotated by Heritage 21)





Figure 25. Chimney on the main building's southern end (Staining, lichen growth). A small carbonaceous occlusion can be seen on the bottom of the right chimney pot (does not weaken the stone).



Figure 26. Chimney above the main building's western central gable (Staining).

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Figure 27. Chimney on the school hall's western façade (Victoria Street) (Staining, lichen growth).



Figure 28. Chimney on the school hall's southern end (Staining, lichen growth).

Element	Chimneys	
Location	 Roof of main building Roof of school hall	
Condition	Fair (Staining, lichen growth)	
Cause	Staining due to rainwater with pollutants over timeLichen growth	
Heritage significance	High	
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Preventative action: seismically bracing the chimneys (bracing rod inserted from above through the chimney anchoring it into the underlying stonework in accordance with structural engineer's detail) Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold. 	

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3.3 ROOFS: GABLE BARGE



Figure 29. Gable barge on the school hall northern façade – 1886 western gable.



Figure 30. Gable barge (concrete) on the school hall northern façade – 1950 eastern gable.



Figure 31. Gable barge on the main building southern gables (exfoliation).



Figure 32. Gable barge on the main building western central gable (exfoliation).

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Figure 33. Gable barge on the main building southern façade (exfoliation).



Figure 34. Gable barge on the school hall eastern façade, with evidence of previous repairs (Improperly repaired).

Gable barge	
Gabled roofs of main building and school hall	
Very poor (Exfoliation)	
 Exfoliation due to cementitious/elastomeric mortar causing entrapment of moisture within the sandstone Improper repair of some sections in the past, with indenting of stone not obeying the original joints 	
High	
 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected gable barge stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9⁸). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold. 	

⁸ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.4 GABLE FACE: TYMPANUM





Figure 35. Tympanum of gable face on the projecting part of the most southern gable of the main building (Advanced efflorescence).

Figure 36. Tympanum of gable face on the projecting part of the most northern gable of the main building (Advanced efflorescence).



Figure 37. Top stone on the back of the school hall's Victoria Street gable (Exfoliation).

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Element	Tympanum stone
Location	Gables of the main building and the school hall.
Condition	Fair to very poor (Exfoliation)
Cause	 Advanced efflorescence due to cementitious/elastomeric mortar causing entrapment of moisture within the sandstone Exfoliation due to failing flashing (Figure 37)
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected tympanum stones of the gable faces and indent with new stones to match original profiles. Remove failing flashing (Figure 37, back of Victoria Street gable of the school hall) and flash with electrolytically compatible metals. Repoint with appropriately specified mortar (1:2:9⁹). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

⁹ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.5 **BOUNDARY WALL: CAPPING**



Figure 38. Capping on the eastern façade of the school hall (Delamination causing unstable stone).



Figure 40. Detail of capping on the boundary wall between the main building and the school hall (Staining, hairline cracking, and cement application at later date).



Figure 42. Capping on the boundary wall to the south of the school hall (eastern façade) (Staining, lichen growth, vegetation growth).



Figure 39. Capping on the boundary wall between the main building and the school hall (Improperly repaired).



Figure 41. Capping on the boundary wall between the main building and the school hall (Cramps have been added at a later date).



Figure 43. Capping on the boundary wall to the south of the school hall (western façade) (staining, lichen growth, hairline cracking).

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SANDSTONE CONDITION ASSESSMENT AND REMEDIATION ADVICE - ST VINCENT'S COLLEGE



Figure 44. Later addition to the southern end of the main building: this is not sandstone, but concrete capping.

Element	Capping
Location	Boundary wall
Condition	Poor (staining, lichen growth, vegetation growth, hairline cracking, delamination, improperly repaired)
Cause	 Staining due to rainwater with pollutants over time Lichen growth Vegetation growth due to moisture issues and the location of the electrical duct Hairline cracking due to cementitious/elastomeric mortar Delamination due to cementitious/elastomeric mortar Improper repair of some sections in the past, with indenting of stone not obeying the original joints
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove vegetation. Relocate electricity duct away from the building or if redundant, remove entirely. Remove affected capping and replace with new stones to match original stones. Repoint with appropriately specified mortar (1:2:9¹⁰). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

¹⁰ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.6 WINDOWS: LABEL MOULDS



Figure 45. Label moulds around stain-glass window on the main building's central gable (western façade) (Delamination/case hardening and removal of the label mould).



Figure 46. Label moulds around windows on the western façade of the main building (Delamination/case hardening).



Figure 47. Label moulds around centrally located *oeil de boeuf* window on the main building's most southern gable/right gable (western façade) (Delamination/case hardening and removal of the label mould).



Figure 48. Label moulds around centrally located *oeil de boeuf* window on the main building's most northern gable/left gable (western façade) (Delamination/case hardening and removal of the label mould).

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SANDSTONE CONDITION ASSESSMENT AND REMEDIATION ADVICE – ST VINCENT'S COLLEGE



Figure 49. Label moulds around the small triple gothic windows on the main building's central gable (western façade) (Delamination/case hardening and removal of the label mould).



Figure 50. Detail of one of the label moulds, which –even though the section has been removed in the past, it continues to degrade as a result of the cementitious/ elastomeric mortar in the joints.

Element	Label moulds
Location	Around all triple gothic windows on the western façade (Victoria Street) of the main school building
Condition	Poor (delamination/case hardening, removal of the label mould)
Cause	 Delamination/case hardening due to cementitious/elastomeric mortar causing entrapment of moisture Removal of the label mould in the past under a make-safe program
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected label mould stones and indent. Where previously removed, indent to match original profile. Repoint with appropriately specified mortar (1:2:9¹¹). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

¹¹ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.7 WINDOWS & DOORS: LINTELS



Figure 51. Lintels on the second floor of the main building roof.



Figure 53. Lintels of the 1886 school hall section.



Figure 52. Lintel on western façade (Victoria Street) of the school hall building (Exfoliation).



Figure 54. Concrete Lintels of 1950 addition to school hall.

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SANDSTONE CONDITION ASSESSMENT AND REMEDIATION ADVICE - ST VINCENT'S COLLEGE

Element	Lintels
Location	Above windowsAbove doors
Condition	Fair (Exfoliation)
Cause	Exfoliation due to cementitious/elastomeric mortar causing entrapment of moisture
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Indent affected stones ('Voussoir indent') to match original profiles. ¹² Repoint with appropriately specified mortar (1:2:9¹³). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

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 ¹² The concrete (1950s) lintels are in good condition, so do not need any remediation works.
 ¹³ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

3.8 WINDOWS: SILLS



Figure 55. Sills on the western façade of the main building (Cementitious/elastomeric mortar used to fill up gap).



Figure 57. Sill on the western façade of the main building (Exfoliation).



Figure 56. Sills on the western façade of the main building (Carbonaceous material).



Figure 58. Sill on the western façade of the school hall (Exfoliation). The red arrow shows where the cementitious/elastomeric mortar has caused moisture entrapment which has caused exfoliation of the stone.



Figure 59. Sills on the western façade of the main building (Exfoliation).



Figure 60. Sills on the western façade of the main building (Delamination, case hardening).

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Element	Sills
Location	Windows of main school building and school hall.
Condition	Fair (Staining, lichen growth, exfoliation)
Cause	 Staining due to rainwater with pollutants over time Lichen growth Exfoliation due to cementitious/elastomeric mortar causing entrapment of moisture
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Indent affected stones ('Inverted voussoir indent') to match original profiles.¹⁴ Repoint with appropriately specified mortar (1:2:9¹⁵). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

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 ¹⁴ The concrete (1950s) lintels are in good condition, so do not need any remediation works.
 ¹⁵ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

3.9 COLUMNS BETWEEN CENTRAL WINDOWS



Figure 61. Columns on the western façade of the main building.



Figure 62. Columns on the western façade of the main building.



Figure 63. Detail of column capital (Staining, corner cracked off)

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SANDSTONE CONDITION ASSESSMENT AND REMEDIATION ADVICE – ST VINCENT'S COLLEGE

Element	Columns
Location	Between central windows on the western façade (Victoria Street) of the main school building.
Condition	Fair (Staining, corner of capital cracked off)
Cause	Staining due to rainwater with pollutants over time.Corner of capital cracked off due to delamination
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein.¹⁶ Remove affected capital stones and replace with new stones to match original profiles. Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

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¹⁶ A close range investigation is necessary, especially to the central gable part of the façade, due to the height of the building and the street trees which prevent visibility and adequate photography of parts of the façade.

3.10 STRING COURSES



Figure 64. String course on the western façade of the main building (Delamination/case hardening).



Figure 65. String course on the western façade of the main building (Removal of the string course).

Element	String course
Location	 Western façade (Victoria Street) of the main school building Eastern façade of the school hall (1886 part of the L-shaped building, perpendicular to Victoria Street)
Condition	Poor (delamination/case hardening, removal of the string course)
Cause	 Delamination/case hardening due to cementitious/elastomeric mortar causing entrapment of moisture Removal of the string course in the past under a make-safe program
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected string course stones and indent. Where previously removed, indent to match original profile. Repoint with appropriately specified mortar (1:2:9¹⁷). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

¹⁷ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.11 DOORS: LABEL MOULDS



Figure 66. Label moulds around central entry door to the main building (Delamination/case hardening).



Figure 67. Label moulds around entry in boundary wall section to the south of the school hall (Staining).

Element	Label moulds
Location	 Around the central entry door to the main school building (Victoria Street) Around the entry door located within the boundary wall section to the south of the school hall
Condition	Fair (staining, delamination)
Cause	 Staining due to rainwater with pollutants over time. Delamination/case hardening due to cementitious/elastomeric mortar causing entrapment of moisture
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected label mould stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9¹⁸). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

¹⁸ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.12 DOORS: VOUSSOIRS/ARCH AND FIELDED PANELS



Figure 68. Arch above main building central entry door. The fielded panel above this door includes a six-lobed foil glazed oculus.



Figure 69. Detail of arch above main building central entry door (Efflorescence).

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Figure 70. Detail of arch above main building central entry door (Efflorescence).



Figure 72. Arch above doorway through boundary wall section to the south of the school hall (Efflorescence). The fielded panel above this door includes three pointed arched recesses.



Figure 71. Detail of arch above main building central entry door.



Figure 73. Detail of arch above doorway through southern boundary wall section (Efflorescence).

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Element	Voussoirs/arch and fielded panels
Location	 Above the central entry door to the main school building (Victoria Street) Above the entry door located within the boundary wall section to the south of the school hall
Condition	Fair (efflorescence)
Cause	Efflorescence due to cementitious/elastomeric mortar
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected voussoir/arch stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9¹⁹). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

¹⁹ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.13 DOORS: JAMBS



Figure 74. Door jambs of the main building's central entry (Efflorescence, delamination).





Figure 76. Door jambs of the main building's central entry (Efflorescence, delamination).



Figure 77. Door jambs of the main building's central entry (Efflorescence, delamination and filled up holes probably relating to original signage/doorbell).

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Figure 78. Door jambs of the main building's central entry (Efflorescence, delamination).



Figure 80. Door jambs of the entry door immediately south to the school hall building (Efflorescence, discolouration).



Figure 79. Door jambs of the main building's central entry (Delamination).

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Element	Door jambs
Location	 Around the central entry door to the main school building (Victoria Street) Around the entry door located within the boundary wall section to the south of the school hall
Condition	Poor (efflorescence, delamination)
Cause	 Efflorescence due to cementitious/elastomeric mortar Delamination due to cementitious/elastomeric mortar
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected jamb stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9²⁰). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²⁰ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.14 HERALDRY (SIGN)



Figure 81. 'St Vincent's Convent' sign above the central entry to the main building (Delamination, salt crystallization).



Figure 82. 'St Vincent's Convent' sign above the central entry to the main building (Delamination, salt crystallization).

Element	Heraldry 'St Vincent's Convent'
Location	Above the central entry door to the main school building (Victoria Street)
Condition	Poor (efflorescence, delamination)
Cause	 Salt crystallization due to cementitious/elastomeric mortar Delamination due to cementitious/elastomeric mortar
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Indent entire stone. Otherwise consider replacing entire stone with cast bronze facsimile. Repoint with appropriately specified mortar (1:2:9²¹). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²¹ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.15 BUTTRESSES: SADDLE STONES AND CAPPING



Figure 83. Saddle stones and capping on buttress on the western façade of the main building (Delamination).



Figure 84. Saddle stones and capping on buttress on the western façade of the main building (Delamination).



Figure 85. Saddle stones and capping on buttress on the eastern façade of the main building (Replaced in the past).

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Element	Saddle stones and capping
Location	Buttresses (western and eastern façade of the main school building)
Condition	Poor (delamination)
Cause	Delamination
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected capping stones and indent with new stones to match original profiles Repoint with appropriately specified mortar (1:2:9²²). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²² This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.16 NICHES AND 'GABLETS'



Figure 86. Niches on either side of the central gable on the western façade of the main building.



Figure 87. Most northern niche on the central gable of the main building (Staining, delamination).



Figure 88. Detail of northern niche on the central gable of the main building (Staining, delamination on the console bracket).

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Figure 89. Most southern niche on the central gable of the





Figure 91. Gablet on gable on southern façade (front gable) of main building (Previous salt attack).



Figure 93. Gablet on gable on the eastern façade of main building (Staining, lichen growth).

Figure 92. Gablet on gable on the southern façade (back gable) of main building (Efflorescence).



Figure 94. Gablet on the Victoria Street gable of the school hall building (Crack which has been patched with mortar in the past).

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main building (Staining, delamination).



Element	Niches and 'gablets'
Location	 On either side of the central gable on the western façade (Victoria Street) of the main building On the end of the gables of the main building and the school hall building
Condition	Fair to very poor (staining, lichen growth, efflorescence -past and present-, delamination)
Cause	 Staining due to rainwater with pollutants over time Lichen growth Delamination due to inappropriate mortar used in the past Previous salt attack (which has exposed the striations of the stone) of niche on southern façade of main building (Figure 91)
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected niche stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9²³). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²³ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.17 QUOINS (GABLES)



Figure 95. Quoin (under string course) on the central gable of western façade of the main building (Advanced efflorescence). This problem is mirrored on the other end of this central gable.



Figure 96. Quoin on the southern façade of the main building (Staining, delamination).



Figure 97. Quoins on the northern façade of the school hall – 1886 western gable (Efflorescence, delamination).



Figure 98. Quoins on the eastern façade of the school hall (Efflorescence, delamination).

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Figure 99. Quoins (under capping) on the eastern façade of the school hall (Efflorescence).



Figure 100. Quoins on the northern façade of the school hall (Efflorescence). This is where the 1950 addition was joined into the 1886 building.

Element	Quoins
Location	On the end of the gables of the main building and the school hall building.
Condition	Fair to very poor (staining, efflorescence, delamination)
Cause	 Staining due to rainwater with pollutants over time Efflorescence due to cementitious/elastomeric mortar Delamination due to cementitious/elastomeric mortar
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected quoins stones and indent with new stones to match original profiles. Repoint with appropriately specified mortar (1:2:9²⁴). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²⁴ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.18 PLINTH



Figure 101. Plinth on western façade of main building (Staining, case hardening, missing mortar).



Figure 103. Plinth on southern façade of school hall (Delamination).



Figure 102. Plinth on western façade of main building (Staining, case hardening, missing mortar).



Figure 104. Plinth on southern façade of school hall (Incorrectly rendered in the past).

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Element	Plinth
Location	Main school building and school hall.
Condition	Poor (staining, delamination/case hardening, missing mortar, incorrectly rendered in the past)
Cause	 Staining due to rainwater with pollutants over time Delamination/case hardening due to inappropriate mortar use in the past Mortar missing due to sections breaking away with the stone due to case hardening and due to inappropriate mortar in the vicinity Incorrectly rendered in the past
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected stones at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Remove affected plinth stones and indent with new stones to match original profiles. Where stone has been inappropriately rendered over in the past, remove render and indent the stone to match original profile. Repoint with appropriately specified mortar (1:2:9²⁵). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.
	Gommage or Heritage No.1 system and remove scaffold.

²⁵ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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3.19 BRICKS



Figure 105. Bricks on western façade of main building (Efflorescence).



Figure 106. Plinth on western façade of main building (Efflorescence).



Figure 107. Bricks on the eastern side of the boundary wall between the main building and the school hall (missing mortar, cracking).

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Element	Bricks
Location	Main school building and school hall.
Condition	Good to poor (efflorescence, case hardening, missing mortar, cracking)
Cause	Efflorescence due to the elastomeric sealant which has been applied in the past and which has caused the glazing to come off the bricks
Heritage significance	High
Conservation action	 Erect scaffold to complete inspection of all affected brick at close range. Use scaffold to invite tenderers to price the works and carry out the remediation as specified herein. Repoint with appropriately specified mortar (1:2:9²⁶). Follow up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

²⁶ This is a mixture of 1 part cement, 2 parts lime and 9 parts sand (1:2:9).

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4.0 CONCLUSION AND RECOMMENDATIONS

The Main School Building and the Small School Hall Building were both constructed in 1886. The Main School Building had alterations take place to its northern façade when in 1938 the College building was constructed up against this façade. In 1967 an addition was constructed to the eastern façade. The Small School Hall was originally an L-shaped structure; however, an addition was attached to the eastern façade in 1950.

The sandstone elements on the façades of both buildings were the subject of this report, with certain elements in need of repair/conservation. Due to the building's listing as a local heritage item (No. 1121) in Schedule 5 of the *Sydney Local Environmental Plan 2012 (SLEP)*, any repair/conservation works should follow the recommended management under the listings page.²⁷ The recommended management for the exterior of the building mentions that '[...] *there shall be no* [...] alterations to the façade of the building other than to reinstate original features.'

The 2010 St Vincent's College Conservation Management Plan suggests that a building maintenance schedule should be prepared for the college and the buildings. It also suggests that both regular maintenance activities and preventative action and repair should be performed, with prevention of continuing deterioration taking priority over widespread repair.²⁸

This report has found that many of the sandstone elements are in need of repair/conservation, with different factors playing a role in the degradation to the buildings. The buildings are 130 years old, with ageing and weathering playing a major role.

Previous unsympathetic repairs²⁹ have also played a large part in the degradation of certain elements,) with application of inappropriate mortars accelerating moisture-related degradation processes such as efflorescence. During one of the make-safe programmes, parts of projecting elements (label moulds and string courses) were removed, thereby defacing the building. To meet heritage requirements, these elements need to be reinstated.

Heritage 21's recommendations are based both upon concern for heritage outcomes and the public liability implications for the college.

Based on the above findings, Heritage 21 recommends the following:

• For all affected elements to be assessed for soundness and for failing stone to be removed and replaced using the indenting method;

²⁹ Including a make-safe programme during the 1990s.

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²⁷ St Vincent's Convent Group Including Buildings and their Interiors and Grounds, in: NSW Office of Environment and Heritage. Accessed January 2016. http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2421381

²⁸ Daniell, R, *Conservation Management Plan: St Vincent's College, Victoria Street, Potts Point*, December 2010, p121.

- For inappropriate mortar (not of an impervious nature such as cementitious or elastomeric) • to be removed;
- For appropriately specified mortar to be applied (1:2:9) by first removing the existing • mortar/ elastomeric sealant and preparing the stone joints to receive a minimum 20 mm pointing depth; and
- For these procedures to be followed up with a general cleaning of the façade using the Gommage or Heritage No.1 system and remove scaffold.

To be able to achieve this, Heritage 21 recommends for scaffolding to be erected to along the affected facades to:

- Allow closer inspection of all elements;
- Allow for masons to tender for the required works; and •
- Allow for the required works to be executed. •

The works could either be executed in one longer timeframe, requiring the scaffolding to be installed along the entire façade, or be performed in separate shorter timeframes, allowing the scaffolding to be moved along the façade in sections.

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Appendix E – Shreeii Structural Civil Engineers Report



